LOG BOOK.

OF

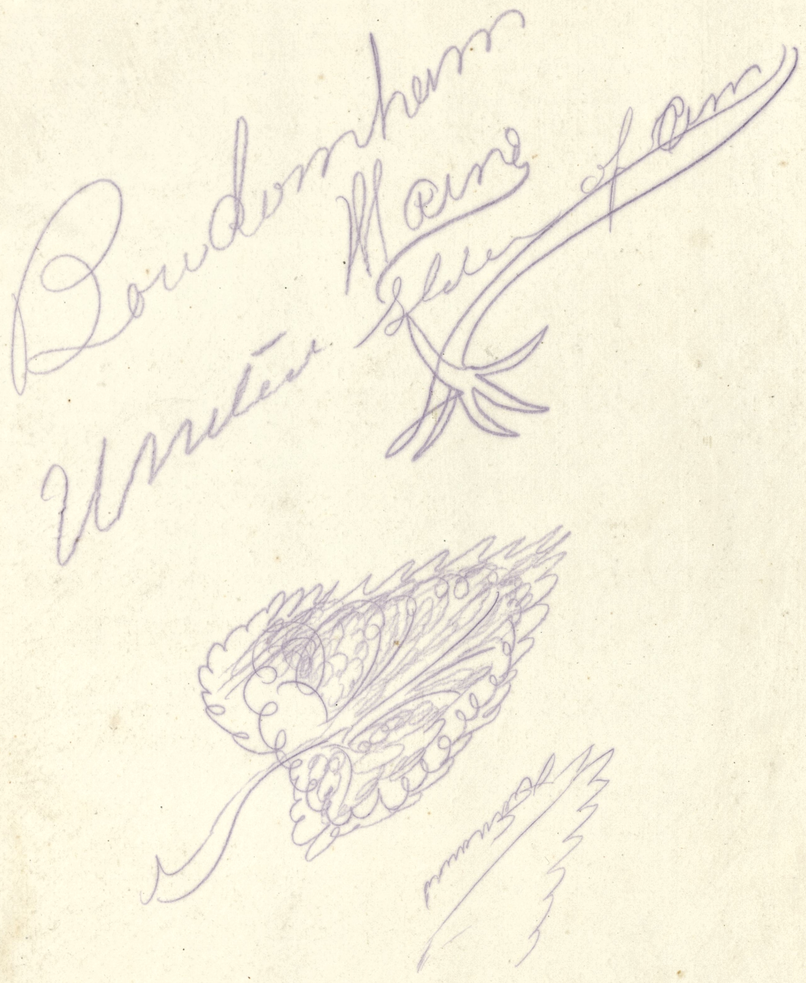
Bark. Deborah Pennell

J. D. Pennell Master

Aug 29/68

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1869

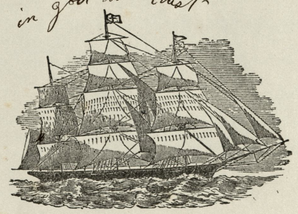
LOG BOOK

VOYAGES OF THE

front room

American Bark Deborah Pennell

COMMANDED BY J D Pennell of Brunswick Maine U S A



in good we trust.

Charles F Woodbe

SAMUEL P. PEDRICK & CO.,

SHIP CHANDLERS AND GROCERS,

No. 426 SOUTH WHARVES,

PHILADELPHIA.

Thalmessinger & Cahn, Stationers, 310 Broadway, N. Y.

Journal from Sunapee Islands Pan towards Callao

Time Kept Civil Time

Monday 11 day of October 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1						Tuesday the 12 October Sea time
2						
3	2		SW ½ W		1¼ Point	At 2 Pm. Set Sail & proceeded
4	2					to Sea with Moderate breese
5	2					SS E Middle & Latter hours
6	2					much the same
7	2		SW			
8	3					
9	3		SW ½ S			Ends Cloudy Obs
10	3	1				
11	3	1				
12	3	1				
1	3	1				
2	3	1				Draft
3	3	1				
4	3	1				
5	3	1				
6	3	1				
7	3	1				
8	3	1				
9	3	1				
10	3	1				Pumps well attended
11	3	1				
12	3	1				Draft 19 feet 3 inches even keel

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3	1	SW ½ S		1 Point	Comes in cloudy & Moderate
2	4					breese S by S
3	4					
4	4					
5	4					
6	4					Middle hours fresh breese
7	4					
8	4					
9	4					Latter hours more Moderate
10	4					
11	4					Ends cloudy
12	4					
1	4	1				
2	4	1				
3	4	1				Lat obs 10.00
4	4	1				
5	4	1				
6	4	1				
7	4	1				
8	4	1				
9	4	1				
10	4	1				Pumps attended
11	4	1				
12	4	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Gunaper Islands towards Callao

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 14 day of October 1869
1	4		SW ½ S			Comes in fresh breezes SE ½ S and cloudy
2	4					
3	4					
4	4					
5	3	1				Middle hours moderate
6	3	1				
7	3	1				
8	3					
9	3					Last hours moderate breezes ESE
10	3		S S W			Ends cloudy
11	3					
12	3	1				
1	3	1	S W ½ S			
2	4					
3	4					
4	4					
5	4		S S W			Lat obs 11.02
6	3	1				
7	3	1				
8	3	1				
9	3					
10	3					
11	3					Rumps well attended
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Friday 15 day of October 18
1	3		S S W	S E		First 24 hours moderate from S E to S E ½ E
2	3					
3	3					& cloudy
4	3					
5	3					Ends the same
6	3					
7	3					
8	3		S W ½ S	S E ½ S		
9	3					Lat obs 12.25 S
10	3					
11	3	1				
12	3	1				
1	4		S ½ W ½ W	S E ½ E		
2	4					
3	4					
4	3	1				
5	3	1	S S W	S E		
6	3					
7	3					
8	3					
9	3					
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Gunaper Islands towards Callao

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 16 day of October 1869
1	3		S ½ W	S E ½ S		Comes in fresh breezes
2	3					
3	3					10 Pm fresh squalls with Rain handed Royals
4	3					
5	3					
6	3	1				1.30 am handed Flying Jib Set Up'd Rigging Up Fore sail
7	4					
8	4					
9	4					
10	5					Carried away Leech rope of main Up'g gaining 1 7.30 but & set reuove
11	5					
12	5					
1	4					
2	4					Ends more moderate with Squalls & Heavy sea
3	4					
4	3	1				
5	3	1				
6	3	1				
7	3	1				
8	3	1	South	E S E		
9	3					Lat obs 13.57
10	3					
11	3					Rumps well attended
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 17 day of Oct 1869
1	3		South	E S E		Comes in fresh breezes & high sea
2	3					
3	3					
4	3					7 Pm Squally handed Light Sails
5	3					
6	3		S ½ W	S E ½ E		
7	3					
8	3	1				Last hours strong breezes & Squally
9	3	1				
10	3	1				Ends the same
11	3	1				
12	3	1				at 12 Meridian Tacked to N E
1	3	1				
2	3	1				
3	3	1				Lat 15.19 S
4	4					Long 84.48 W
5	4					
6	4					
7	3	1				
8	3	1	South	E ½ E		
9	3	1				
10	3	1				
11	3	1				
12	3	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Guanapee Isl towards Callao

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 18 day of October 1869
1	3	1	N E			comes in fresh Breses & squally
2	3	1				
3	3	1				
4	3	1				
5	3	1				
6	3	1				6 Rec heavy squalls handed Fore topgallsail & flying jib Upsail Mizen top Stafsail &c
7	3	1	N E ½ E			
8	3	1				
9	3	1				
10	3					Middle hours squally with Rain
11	3					
12	3					
1	3		N E by E			Last hours more moderate Set F Topsail Flying jib Mizen top Staysail &c
2	3					
3	3					
4	3					
5	2	1				
6	2	1				
7	2	1				Ends Fair & cloudy with fresh breses E & E
8	3					
9	3					
10	3					
11	3	1				Lat Obs 14.23
12	3	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Thursday 19 day of October 1869
1	3	1	N by E	E by S		comes in fresh breses E S E & cloudy
2	3	1				
3	3	1				
4	3	1				
5	3	1				
6	3	1				Middle & Latter hours moderate breses
7	4					
8	4					
9	4					
10	4					Ends moderate & cloudy
11	4					
12	4					Variation 1 point Easterly
1	4		N E	E S E		
2	3	1				
3	3	1				
4	3	1				
5	3	1				
6	3	1				
7	3	1				Lat Obs 13.21
8	3					
9	3					
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Guanapee Isl towards Callao

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Wednesday 20 day of October 1869
1	3		N E	E S E		comes in moderate & cloudy
2	3					
3	3					
4	3					Middle hours moderate & cloudy
5	3					
6	4					Last hours the same
7	4					
8	4					
9	4					
10	4		N E by E	S E by E		
11	4					
12	4					
1	3	1				
2	3	1				
3	3	1				
4	3	1				
5	4					
6	4					
7	4					
8	4					
9	4					Prompts well attended
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 21 day of Oct 1869
1	4		E by E	S E		comes in moderate & cloudy
2	4					
3	4					
4	4					Middle & Latter hours the same
5	4					
6	4					
7	4					
8	4					Ends overcast
9	4					
10	3	1				No Obs
11	3	1				
12	3	1				
1	3	1				
2	3	1				
3	3	1				
4	3	1				
5	3	1				
6	3	1				
7	3	1				
8	3					
9	3					
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Gunaper Isd towards Callao

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Friday 22 day of October 1869
1	3		E by N	S E by S		Comes in overcast &
2	3					Moderate weather
3						
4						
5						Middle & Latter hours light
6						Breese.
7						
8						Ends light airs & cloudy
9						
10						
11						
12						Lat obs 11.47 S
1						
2						
3						
4						
5						
6						
7	2		E by N & S			
8	2					
9						
10			E by N			Pumps well attended
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Saturday 23 day of October 18
1	3		East	S S E		Comes in light airs S S E
2	3					
3						4 Run Made the Hormigas Rocks
4						Bearing S S W Dist of 11 miles
5						
6						8 Run Made San Lorenzo Isd
7						Bearing S E by E dist 14 Miles
8	2					
9	2					12.30 pm Tacked to S W
10						
11						11 am Tacked to East
12			S			
1	1	1	S W			Ends light airs S S E
2	1	1				
3						
4						Lat Obs 11.54 South
5						
6						
7						
8						
9	2					
10	2					
11	2					
12	3		East			

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Gunaper Isd towards Callao

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 24 day of Oct 1869
1	2		E by S	S by E		Comes in light airs S by E
2	2					
3	2					
4						Middle hours Calms
5						
6						Ends light breese S S E
7	"		Calms			
8	"					
9						3 am Wore ship to S S W
10						
11						8.30 " Tacked to Eastward
12			31			
1						
2						
3						
4	1		S W by S	S E by S		
5	2					
6	2					Lat Obs 11.67 S
7	2					
8	3					
9	3		E by N			Pumps well attended
10	3					
11	3					at 9. Run Civil time Came to Anchor in
12	3					Callao Harbour with Starboard Anchor 30 fathoms cable

13 days passage

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Monday 25 day of October 18
1			Monday Oct. 25th			Moderate breezy & fine weather.
2						Three men off to ship.
3						Employed scrubbing low sides &c.
4						Had a visit from the Surveyors.
5						
6			Tuesday 26th "			Employed painting outside.
7						Two men ashore on liberty.
8						
9			Wednesday 27th "			Finished painting outside.
10						Six two men who went ashore
11						on liberty yesterday returned this
12						morning. Carpenter & three men
1						went ashore. Carpenter & one man
2						returned at night.
3						
4			Thursday 28th "			Moderate weather and warm
5						Six two men who went ashore yesterday
6						returned this morning. Cook
7						went ashore.
8						
9			Friday 29th "			Fine weather. Cook returned
10						this morning. Filled water and
11						took part of the stores on board.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Leaving in towards Callao Bay.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Saturday October 30th			Pleasant weather. Took remainder of stores on board. Cook deserted the ship
2						
3						
4						
5			Sunday 31st			Pleasant weather. New Cook came aboard.
6						
7						
8						Callao Nov 1. 1869
9						Received from Capt. J. S. Pennell and owners of American Bark
10						Deborah Pennell The Sum
11						of Seventy dollars ($70.) for
12						two months advance wages
1						on a voyage from Callao to
2						Hampton Roads for orders.
3						
4						John. Wilson.
5						Callao Nov 1. 1869
6						Be it understood hereby
7						acknowledge, each one of us to
8						have received the Sum of
9						Ninety dollars ($90) from Capt.
10						and owners of American Bark
11						Deborah Pennell being three
12						months advance wages on a voyage

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

from Callao to Hampton Roads.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
1						Geo. Clinton —
2						Ronald Kelly
3						mark
4						Wellington Weeks
5						John X Anthony
6						mark
7						
8			Monday November 1st			Pleasant weather. Moderate
9						breezes from the Southward.
10						Employed getting ready for
11						Sea. This day Contains but
12						twelve hours in order to
1						Commence Sea time.
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 2d day of November 18 69
1						
2						At 3 P.M. Hove short and made sail.
3						At 4. Remainder of the crew came
4						on board.
5						At 5 P.M. Hove up the
6	3					anchor, filled away and proceeded
7	5					to sea. All sail set
8	5		S by W	S S E		
9	5					At 7 P.M. Ft Stevens bore
10	3					East dist 6 mls.
11	3					First part of the night
12	3					moderate.
1	3					Latter part fresh breez
2	4	1				and heavy sea with which the
3	4	1				day ends.
4	4	1				
5	4	1				Pumps Sounded.
6	4	1				
7	4	1				Lat. 12.40.
8	4	1				
9	5					
10	5		— " —	— " —		
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3d day of November 18 69
1	4	1	SW½S	S2E/S		First part of the day pleasant breez
2	4	1				and heavy head sea.
3	4	1				Employed Sailors & Mates.
4	4	1				
5	4	1				At 4 P.M. Took in Royals
6	4	1				& Stays'l to sail.
7	4	1				At 8. Do Gallant sails.
8	4	1				and flying jib.
9	4		SW/S			
10	4					Through the night pleasant
11	4					and heavy sea.
12	4					
1	4					Latter part of the day more
2	4		SSW	S E		moderate. Set Stays'l Gallant sails.
3	4					
4	4					
5	4				S/H	Pumps Attended.
6	4					
7	4					
8	4					Lat 4 46. N. 39.
9	4					
10	4					
11	4		— " —	— " —		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of November 1869
1			SSW	SE½E		First part of this day fresh breys from S. Eastward & heavy sea.
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12			—"—	—"—		Middle hours. Squally.
1						
2						
3						Latter part of the day more moderate. Under sail.
4						
5						Carpenter employed making a new Jeff Topsail &c. &c.
6						
7						Pumps Attended.
8						
9						Lat. by Ob. 15.30.
10						
11			—"—	—"—		
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 5th day of November 1869
1	5		SSW	SE		This day Commences with fresh breys from S. Eastward and much sea on.
2	5					
3	5					
4	5					
5	5					
6	5					
7	5					
8	5		SSW			At 8 P.M. Took in Light sails and at 10 furled Fore-t'p-gallant sail.
9	4					
10	4					Middle hours: Moderate & squally. Set Fore t'p-gallant sail and flying jib.
11	4					
12	4					
1	4					
2	4					
3	5					Latter part of the day moderate and Cloudy. All Sail Set.
4	5					
5	5					
6	5					Pumps Attended.
7	5		SSW			
8	6					Lat. by Ob. 17.10
9	4					
10	4					
11	4		—"—	—"—		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 6th day of November 1869
1			SSW	SE		
2						
3						
4						
5						Throughout this twenty four hours fresh breys from the S. Eastward.
6						
7						
8						
9						Cloudy and cold.
10						
11						
12			—"—	—"—		
1						
2						Pumps Attended.
3						
4						
5						Lat. by Ob. 18.58.
6						
7						
8						
9						
10						
11			—"—	—"—		
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 7th day of November 1869
1	5		SSW½W	S. Eastly		
2	5					
3	5					First part of this day moderate from S. Eastward & cloudy.
4	5					
5	5					
6	5					
7	5					Middle hours. Squally.
8	5					
9	5					
10	5					
11	5					
12	5			—"—		The day ends with light breys and fine, clear weather.
1	4					
2	4					
3	4					All Sail Set
4	4					
5	4					
6	4					Lat. by Ob 20.50.
7	4					
8	4					
9	4		SW			Six days out.
10	4					
11	4			—"—		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hamptons Roads.

8th day of November 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5	1	S S W			
2	5	1				
3	5	1				
4	5	1				
5	5					
6	5					
7	5					
8	5					
9	5					
10	5					
11	5					
12	5					
1	5		S by W			
2	5					
3	5					
4	5					
5	5					
6	5					
7	5	1				
8	5	1				
9	5					
10	5					
11	5					
12	5					

WINDS: S. Easterly.

All this day moderate breezes from S. & Eastward and fine weather

All sail set

Crew Passions employed.

Lat. by Obs. 21.50.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

9th day of November 1869

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	3		S S W			
2	3					
3	3					
4	3					
5	3					
6	3					
7	3					
8	3					
9	3					
10	3					
11	3					
12	3					
1	3					
2	3					
3	3					
4	3					
5	3					
6	3					
7	3					
8	3					
9	3					
10	3					
11	3					
12	3					

WINDS: S. Easterly.

Light breezes from the S. Eastward and pleasant weather

Piked the decks.

Lat. by Obs. 22.55.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

10th day of November 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4		S S W			
2	4					
3	4					
4	4					
5	4	1				
6	4	1				
7	4	1				
8	4	1				
9	4					
10	4					
11	4					
12	4					
1	4	1				
2	4	1				
3	4	1				
4	4	1				
5	4					
6	4					
7	4					
8	4		South			
9	5					
10	5					
11	5					
12	5					

WINDS: S. Easterly.

First part of this day and middle hours moderate breezes and clear weather.

Latter part. Light winds and cloudy.

Lat. by Obs. 24.14.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

11th day of November 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		South			
2	3					
3	3					
4	3					
5	2					
6	2					
7	2					
8	2		S by W ½ W			
9	3					
10	3					
11	3					
12	3					
1	3					
2	3					
3	3					
4	3					
5	3					
6	3					
7	8					
8	8					
9	4					
10	4					
11	4		"			
12	4					

WINDS: S. Easterly.

First part of this day light and cloudy.

Latter part. Moderate breezes and pleasant weather.

Lat. by Obs. 25.7.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 12th day of November 1869
1	2	1	S S W	S. E.		
2	2	1				
3	2	1				
4	2	1				
5	2					Throughout this day light airs from S E to East and pleasant weather.
6	2					
7	2		S by E	East		
8	2					
9	2					
10	2					
11	1	1				
12	1	1				Sent Sail Overboard
1	1	1	S S W	S E		
2	1	1				
3	2					
4	2					
5	2					Lat. by Ob. 25.56.
6	2					
7	8					
8	8					
9	2		S by E	East		
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 13th day of November 1869
1	1	1	S by E	N E		
2	1	1				
3	1	1				
4	1	1				First part of this day light air from N E.
5	1	1				
6	1	1				
7			Calm	Calm		
8						
9						
10						Remainder of the day calm. Pleasant weather & warm
11						
12						
1						
2						
3						
4						Lat. by Ob. 26.05.
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of November 1869
1		Calm		Calm		
2						
3						First part of the day Calm and clear weather.
4						
5						
6						
7	2		East	S S E		
8	2					At 6 P.M. light airs fm S & E.
9	2	1	E S E			
10	2	1				At 10 P.M. tacked to S S W.
11	8		S S W	S E		
12	8					
1	8					
2	8					The day ends with light airs nearly Calm and very dark.
3	2	1				
4	2	1				
5	2					Lat. by Ob. 26.32.
6	2					
7	2					
8	2					Thirteen days out.
9	2					
10	1	1	South E by E			
11	1	1				
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 15th day of November 1869
1			Calm			
2						
3						
4						The day begins Calm airing up a little at sundown.
5						
6						
7	1		S W	S S E		
8	1					
9	2					Latter part of the day light air from N E & fine weather.
10	2					
11	2					
12	2					Heavy swell from the Southward.
1	2		S S W	S E		
2	2					
3	1	1				
4	1	1				
5	1	1				Lat. by Ob. 26.50.
6	1	1				
7	1	1				
8	1	1	S by E	N E		
9	1	1				
10	1	1				
11	1	1				
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 16th day of November 1869
1			SE	N.E.		
2						
3						
4						
5						
6						Strong part this twenty-four hours light airs from N.E. to N.N.W and pleasant weather.
7				North		
8						
9						
10						
11				N.W		
12						
1			— " —			
2						
3						
4						
5						
6						
7						
8						
9						
10						
11			— " —	— " —		
12						

Lat. by Ob. 27. 20.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS	LEEWAY.	REMARKS. 17th day of November 1869
1	3		SE	NW		
2	3					
3	3					
4	3					
5	3					All this day light breezes from N.W to North and pleasant weather.
6	3					
7	3					
8	3					
9	4					Bent new sails.
10	4					
11	4					
12	4		— " —			
1	4			North		Pumps Attended.
2	4					
3	4					
4	4					
5	5					
6	5					
7	5					
8	5					
9	5					
10	5					
11	5		— " —	— " —		
12	5					

Lat. by Ob. 28.32

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 18th day of November 1869
1	4		SE	N.W		
2	4					
3	4					This day begins with increasing breze from N.Westward.
4	5					
5	5					
6	5					
7	5					
8	5					Middle hows. Fine breze from West hauling Southerly.
9	4					
10	4					
11	4					
12	4			West		
1	4					
2	5					Latter part: Reg light from S.W and pleasant weather.
3	5					
4	5					
5	5					
6	5					
7	5		SSE	SW		Lat. by Ob. 30.00.
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 19th day of November 1869
1	3		SE	NW		
2	3					
3	3					First part of the day light breze from W.S.W and pleasant weather.
4	3					
5	3					
6	3					Middle hows. Much the same.
7	3					
8	3					
9	3					
10	3		— " —			
11	4					
12	4					Today ends with the wind West very light.
1	4					
2	4					
3	2	1				
4	2	1				
5	2	1				Lat. by Ob. 31.00.
6	2	1				
7	2			West		
8	2					
9	2					
10	2					
11	2		— " —	— " —		
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 20th day of November 1869
1	3		S by E	West		
2	3					
3	4					First part of the day light
4	4					breez from West'd & fine.
5	4					
6	5					Middle hours: Ahead & Equally.
7	5					
8	5					At 1 A.M. mid Lights to South
9	5					in a Squall. Parted light Sails.
10	5					
11	5					At 8 A.M. Tacked to the S.W.
12	5					
1	6					
2	6		E by S	S by E		
3	6					The day ends moderate from
4	6					S.S.E. Cloudy & Cool.
5	5					At Light Sails.
6	5		East	S SE		
7	5					Pumps attended.
8	5					
9	5		S W			Lat. by Ob. 32.10.
10	5					
11	5		— " —	— " —		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 21st day of November 1869
1	3		S W by W	S by E		
2	3					Stoongdont this day light
3	3					breez from South'd. Cloudy
4	3					and cool.
5	2					
6	2					
7	2					
8	2					
9	2					At 8 A.M. Tacked to the Eastward.
10	2					
11	2					
12	2		— " —	— " —		
1	2					Carry a Large Sail
2	2					Steering S. W.
3	3					
4	3					
5	3					
6	3					Lat. by Ob. 32.38
7	3					
8	3					
9	3		E by S			Twenty days out.
10	2					
11	2		— " —	— " —		
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 22d day of November 1869
1	3		East	S SE		
2	3					
3	3					This day Commences with Light
4	3					breez from S & E Cloudy.
5	3					
6	3		S W			At 5 P.M. Tacked to S.W.
7	3					
8	3					
9	3					Middle hours: Stuck to
10	3					Same as the first.
11	3		S S W — S E			
12	3					
1	2	,	S by W			
2	2	,				Latter part of the day and
3	2	,				hauling Easterly. Very moderate.
4	2	,				
5	2	,	South E SE			At Rest in Company.
6	2	,				
7	2					
8	2		S E			Lat. by Ob. 33.00.
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 23d day of November 1869
1			Calm			
2						First part of this day: Calm.
3						
4						
5						
6						
7						
8						
9	2		S by E	N E		Middle & Latter parts: Light
10	2					airs from N E to North and
11	2					pleasant weather.
12	2					
1	2					Crew variously employed.
2	2					
3	2					
4	2					
5	2					Lat. by Ob. 33.32.
6	2					
7	2			North		
8	2					
9	2	1				
10	2	1				
11	2	1	— " —	— " —		
12	2	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 24th day of November 1869
1	1	1	SSE	North		
2	1	1				
3	1	1				
4	1	1				
5	1	1				
6	1	1				Throughout this day light Winds from North to West and fine weather.
7	1	1				
8	1	1				
9	2					
10	2					
11	2			NW		
12	2		—"—			
1	2					
2	2					Lat. by Ob. 34. 00.
3	1	1				
4	1	1		West		
5	1	1				
6	1	1				
7	1	1				
8	1	1				
9	1					
10	1					
11	1		—"—	—"—		
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 25th day of November 1869
1	2		SSE½E	West		
2	3					
3	3	1				First part of this day Light airs from West & Northerly.
4	3	1				
5	3	1				
6	3	1				
7	3	1				
8	3	1		NbW		Middle hours & latter part of the day moderate breezes from NbW & NW & daily increasing Winds from.
9	5					
10	5					
11	5		—"—			All Sail Set.
12	5					
1	5					
2	5					
3	5					Lat. by Ob. 35.40.
4	5					
5	5					
6	5					
7	5					
8	5					
9	5					
10	5					
11	5		—"—	—"—		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 26th day of November 1869
1	5		SSE½E	NbW		
2	5					
3	5					This day Commences with fresh breezes from N & NW and thick.
4	5					
5	6					
6	6					At 6 P.M. Wind increasing Furled light Sails and at 8 P.M. took in Top-gallant Sails and reefed the Mainsail.
7	6					
8	6					
9	6					
10	6					
11	4		SSE	SW		Throughout the night fresh gales and squally.
12	4				1 Pt.	
1	3					Latter part of the day more moderate and clear weather. Set Top-gallant Sails.
2	3					
3	3					
4	3					
5	8					
6	8		SE	SSW		Pumps well attended.
7	8					
8	8				—	
9	8	1				
10	8	1				
11	8	1	—"—	—"—		
12	8	1				Lat. by Ob. 37.22.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 27th day of November 1869
1	3		ESE	South		
2	3					
3	3					
4	3					
5	3					Throughout this day Light winds from South to SW and cloudy.
6	3					
7	3					
8	3					Kept sea on.
9	2					
10	2					Set the Light Sails.
11	2					
12	2					
1	2		SE	SSW		
2	2					
3	2	1				Pumps Attended.
4	2	1				
5	2	1	SSE	SW		
6	2	1				
7	2	1				Lat. by Ob. 38. 17.
8	3					
9	3		SSE½E			
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

28th day of November 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4		SE½E		S. Westerly	
2	4					
3	4					First part of this day moderate from S. Westerly & Cloudy. All Sail Set.
4	4					
5	4					
6	4					
7	4					
8	4					At Midnight Struck the same Cruising Westerly.
9	4					
10	4					
11	4					
12	4		—"—			
1	4					Latter part of the day fresh breez from S.S.W Thick & rainy. Furled fore and aft Sails.
2	4				West	
3	4					
4	4					
5	5					Pumps Attended.
6	5					
7	5				S.S.W.	So. Obs.
8	5					Lat. by D.R. 40.00.
9	6					
10	6					27 days out.
11	6		—"—		—"—	
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

29th day of November 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		SE½E	N.W.		
2	6					This day commences with fresh breez from N.W. Rowling Westerly. Thick weather.
3	6			West		
4	6					
5	6					
6	6					
7	6					
8	6					
9	6	1				At Midnight fresh gales from N.W. Thick & Squally. Furled Top-gallant Sails.
10	6	1				
11	6	1				At Sunrise wind died out to a Calm keeping it again soon after 8am E by S. with which the day ends, Thick & rainy.
12	6	1	—"—			
1	6	1		W.S.W.		Set all Sail.
2	6	1				
3	6					
4	6					
5	2					Pumps Attended.
6			Calm			
7						So. Obs.
8	3			E by S		Lat. by D.R. 42.00
9	5					
10	5					
11	5	1	—"—	—"—		
12	6	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

30th day of November 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	7		SE½E	E by E		
2	7					This day comes in with an increasing breez from E by E and thick weather. Furled Light Sails and at 6 P.M. reefed the courses and upper topsails.
3	7					
4	7					
5	7					
6	7					
7	6					
8	6					
9	6					
10	6					First part of the night blowing hard: Thick & rainy. Took in Upper Topsails, Reefed & Set Mainsail & Jib.
11	5					
12	5					At Midnight moderating fast to a Calm.
1	2		—"—			
2	1					At 3 A.M. Light breez from N.W. Made Sail.
3	1					
4	3			N.W.		This day ends with the wind fresh from N.W. and an ugly cross sea on. Thick & Cloudy. Set Top-gallant Sails.
5	5					
6	5					
7	5					
8	5					Pumps attended.
9	5					So. Obs.
10	6					Lat. by D.R. 44.10.
11	6		—"—	—"—		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

1st day of December 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		SE by S	N.W.		
2	3					First part of this day very light breez from N.W. Heavy sea on. Thick rolling badly.
3	2	1				
4	2	1				
5	2	1				
6	2	1				
7	2	1				Middle hours: Fresh breez from North. Thick weather.
8	2	1				
9	2	1				At 4 A.M. Set all light Sails.
10	2	1		North		
11	5					
12	5					
1	5					Latter part of the day wind very light from East with occasional rain-squalls.
2	5					
3	5					
4	5			N. by E		
5	5					
6	5					
7	5					Pumps Attended.
8	4					
9	4		SSE	East		So. Obs.
10	4					Lat. by D.R. 45.37.
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 2d day of December 1869
1	4		S.S.W.	S E		This day begins with increasing
2	4					breezes from E.S.E.
3	4		S W	S S E		At 6 P.M. Furled light
4	4					sails and at 8 Tacked ship
5	5					took in Top-gallant sails, Reefed
6	6					the Topsails & Foresail. Furled
7	6					Jib and Mainsail.
8	6					
9	2		East		3 pts.	First part of the night blowing
10	2					a hard gale with thick weather
11	2					
12	2					At 4 A.M. More Moderate
1	2		— " —	— " —		Carried Reefs out of the Topsails
2	2					& Set the Reefed Mainsail.
3	2					At Noon Made all Sail.
4	2					Moderate breezes from South and
5	2		E S E	South	1 Pt.	Clear weather.
6	2					
7	2					Pumps attended
8	2					
9	2	/				Lat. by Obs. 45.24.
10	2	/				
11	2	/	— " —	— " —	— —	
12	2	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 3d day of December 1869
1	4		S E & E	South &		
2	4					First part of this day moderate
3	4					South & winds & clear weather.
4	4					
5	4	/				
6	4	/				Middle hours: Fresh from
7	4	/				S.W. and cloudy.
8	4	/				
9	5					The day ends with the wind
10	5					fresh from W. S.W. and thick.
11	5					
12	5			S W		All Sail Set.
1	5					
2	7					Pumps attended.
3	7					
4	7					Do Obs.
5	7					Lat. by DR. 47.18.
6	7					
7	7			W S W		
8	7		S E			
9	7	/				
10	7	/				
11	7	/	— " —	— " —		
12	7	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of December 1869
1	7		S E	W S W		
2	7					This day commences with Rd and
3	7					fresh from W.S.W. & thick weather.
4	7					At 8 P.M. Furled the
5	7					Royals & Soft Topsail.
6	7					
7	8					At Midnight wind
8	8			S W		increased to a gale from S.W.
9	8					Furled Top-gallant Sails.
10	8					
11	8					
12	8		— " —	— " —		Latter part of the day moderate
1	6					and clear.
2	6					At 7 A.M. Set Top-gallant Sails
3	6					and at 9 Made all Sail.
4	6					Large Sea on. Ship Taking
5	6					a board water continually.
6	5					
7	5					Pumps well attended.
8	5					
9	5					Lat. by Obs. 49.52.
10	6					
11	6		— " —	— " —		
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 5th day of December 1869
1	5		S E	West		
2	5					First part of this day fine
3	5					breeze from the West and pleasant
4	5			S W		weather. Wind veering South'ly.
5	5					
6	5					At 6 P.M. Set in thick & wind in-
7	5					creasing. Furled Royals & all
8	5					fore & aft Sails.
9	6		S E & E			At Midnight thick
10	6					and squally. Took in first Top gallant
11	6					Sail and hove to the course.
12	6					
1	6	/				
2	6	/				Latter part of the day fresh gales
3	6	/				from West and clear weather.
4	6	/				Carried the Reefs out of the Foresail,
5	7					set Jib, Spanker &c.
6	7			West		Kept Sea running.
7	7					
8	7					Pumps carefully attended.
9	7					
10	7					Lat. by Obs. 52.02.
11	7		— " —	— " —		34 days out.
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lcn.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

6th day of December 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	7	1	ESE	East		
2	7	1				First part of this day strong gale from East and high Sea.
3	7	1				
4	7	1				
5	7	1				Middle Parts: Moderating fresh and Sea going down.
6	7	1				
7	7					At Midnight Set the Fore T-gallant Sail. Bird looking to the Southward.
8	7					
9	6					
10	6			SE		
11	5					Set & S.B. Made all Sail.
12	5		—"—			
1	4					Latter part of the day light airs from South and pleasant weather.
2	4					
3	4			South		
4	4					
5	4					A Bark in company.
6	2					
7	2					Pumps Attended.
8	1					
9	1					
10	2					Lat. by Obs. 53. 22.
11	2					
12	2		—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

7th day of December 1869

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	3		ESE	South		
2	3					This day begins with light Southerly airs Sounding Bustard.
3	3					
4	3					
5	4			SSW		
6	4					
7	5					
8	5					Middle Parts: Light breeze from SW with occasional hail Squalls.
9	6					
10	6			SW		
11	6					
12	6		—"—			
1	6					Latter part of the day good breeze from W SW and pleasant weather.
2	6					
3	6					
4	6					Set drawing Sail Set.
5	6					
6	6					Pumps attended.
7	6			WSW		
8	6					
9	6					Lat. by Obs. 55. 00.
10	6					
11	5					
12	5		—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

8th day of December 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		East	West		
2	6					
3	6					
4	6					
5	6					Throughout this twenty-four hours light baffling breezes and pleasant weather.
6	6					
7	6					
8	6					
9	6					
10	6					Set drawing Sail Set.
11	5					
12	5		—"—	—"—		
1	4					
2	4					
3	4					
4	4					Lat. by Obs. 55. 44.
5	4					
6	4					
7	4					
8	4					
9	4					
10	4					
11	4					
12	4		—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

9th day of December 1869

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4		East	West		
2	4					
3	4					First part of this day light breezes from West and Calm.
4	4					
5	4					
6	4					
7	5					
8	5					Middle & Latter parts: Moderate from West to W.S.W. and pleasant weather.
9	5					
10	5					
11	5					
12	5					
1	5		—"—	W.S.W.		Set drawing Sail Set.
2	5					
3	5					
4	5					Pumps attended.
5	5		ESE			
6	5					
7	5					Lat. by Obs. 56. 27.
8	5			West		
9	5			to		
10	5					
11	5			South		
12	5		—"—			

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 10th day of December 1869
1	3	1	E by S			
2	3	1				First part of this day light
3	3	1				baffling airs from North to E. and
4	3	1				clear weather with
5	3					occasional light rain squalls.
6	3					
7	3					
8	2					Middle hours: Much the same.
9	2					Hazy Swell from the Eastward.
10	2				N. Latg.	
11	1					
12	0		—"—			Latter part of the day light breezy
1	2					from E by S and fine pleasant
2	2					weather. All sail set.
3	2					
4	2				Baffling.	
5	2					Pumps attended.
6	2					
7	3		East	N. by E.		Lat. by Obs. 56.51.
8	3					
9	2	1				
10	2	1				
11	2	1	—"—			
12	2	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 11th day of December 1869
1	3		E.S.E.	N.E.		
2	3					This day commences with
3	3					light airs from N.E. & fine.
4	3					
5	3					Middle hours: Calm.
6	3					
7	3					
8	3					
9	1	1	SE by E			At 8 A.M. Set a light breeze
10	1	1				from N.W. with which the
11	1	1				day ends.
12	1	1				
1	1					Signalized a French bark
2	1					from Liverpool for Iquique
3			Calm.			94 days out.
4						
5						All sail set
6						
7						Lat. by Obs. 57.22.
8						
9	3		NE by E ½ E	N.W.		
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 12th day of December 1869.
1	4		NE by E	Northerly		
2	4					First part of this day light
3	4					breezes from North to N.E. and
4	4					fine weather.
5	4					
6	4					
7	4					Middle hours: Bird a little
8	4					stronger and hauling Eastly.
9	4		E by E			
10	4					At 8 A.M. Tacked to the N'ward
11	5					
12	5					
1	5		East	N by E		Latter part of the day moderate
2	5					from N.E. and clear
3	5					
4	5					All sail set.
5	5		E by E	N.E.		
6	5					Pumps attended.
7	5					
8	4					Lat. by Obs. 57-08
9	4		N by E			41 days out.
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 13th day of December 1869
1	4		N by W	N.E.		
2	4					First part of this day moderate
3	4					from N.E. and clear weather.
4	4					
5	4		East	N by E		At 4 A.M. Tacked to the Eastward.
6	4					
7	4					Middle hours: Much the same as first.
8	4					
9	3					At 4 A.M. Tacked to the Northward.
10	3					
11	3					
12	3					Latter part of the day light airs
1	3		E by E	N.E.		from N.E. to E. by E. and cloudy.
2	3					
3	3					All sail set.
4	3					
5	3		South	E by E		
6	3					Lat. by Obs. 57-45.
7	3					
8	3					
9	2	1				
10	2	1				
11	2	1	—"—	—"—		
12	2	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of December 1869
1	3		N.N.E	East		
2	3					This day commences with a
3	3					moderate breeze from East & cloudy.
4	3					
5	3					At 8 P.M. Employed Top-gallant sails
6	3					
7	3					and the wind soon after necessity
8	3					to a violent gale took in
9	3					everything but Lower Topsails
10	3					reefed Foresail & reefed Spanker.
11	2	1	North			
12	2	1				
1	2	1	N.N.E	— " —	2 Pts.	At 8 A.M. Moderating fast and
2	2	1				the sea going down. Made sail and
3	2	1				at noon out all reefs and set
4	2	1				Main Top-gallant sail.
5	2	1				
6	2	1				Ends Moderate and Cloudy.
7	2	1				
8	2	1				Pumps well attended.
9	3				1 Pt.	
10	3					Lat. by Obs. 57.00.
11	3					
12	3		— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 15th day of December 1869
1	3		N.N.E	East		
2	3					This day comes in with the wind
3	3					East and moderating.
4	3					
5	2	1				At 4 P.M. Made all sail.
6	2	1	N.E	S.E		
7	2	1				Middle hours: Light Southerly
8	2	1				wind. Saw three vessels bound
9	2	1				to the Eastward.
10	2	1				
11	2	1		South		
12	2	1				Latter part of the day light breezes
1	3		— " —			from S.E and Clear weather.
2	3					
3	3			S.W		All drawing sail at.
4	3					
5	2					
6	2					
7	2					Lat. by Obs. 56.37.
8	2					
9	3					
10	3					
11	3					
12	3		— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 16th day of December 1869
1	3	1	N.E	S.W		
2	3	1				First part of this day light
3	3	1				breezes from S.W and pleasant weather.
4	3	1				
5	3					
6	3					Middle hours: Light baffling
7	2					winds from West to South with
8	2					occasional light rain squalls,
9	2			West		falling Calm about 6 A.M.
10	3					
11	3			to		At 6 A.M. Light breeze from E.N.E.
12	3					
1	2			South		
2	2					The day ends with the wind moderate
3			Calm			from N.E and cloudy.
4						
5						All sail set.
6						
7	2		North	E.N.E		Pumps attended.
8	3					
9	4		N.N.W	N.E		Lat. by Obs. 56.08.
10	4					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 17th day of December 1869
1	4	1	N.N.W	N.E		
2	4	1				The day begins with the wind
3	4	1				moderate from N.E & cloudy.
4	4	1				
5	4	1				At 7 P.M. Made Staten Land
6	4	1				and at 8 A.M. Cape St. John bore
7	4	1				N.N.W Dist 6 miles.
8	4	1				At 6 A.M. Spoke a ship.
9	4	1	N.W			
10	4	1				Saw a large ship bound to
11	4	1				the Eastward.
12	4	1				
1	4	1				Latter part of the day fresh
2	4	1				breezes from N.W and pleasant
3	3		North	E.N.E		weather.
4	2					
5	4					All sail set.
6	5					
7	6		N.E.by.E	North		
8	6					Lat. by Obs. 54.44.
9	6		E.N.E	N.W		
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 18th day of December 1869
1	5		N E	N N		
2	5					First part of this day moderate
3	5					breez from N N & mostly overcast.
4	5					
5	5					
6	5					Middle hours: Moderate from N E.
7	4		E by N	North		
8	4					At 8 A.M. Backed Chch, Wind
9	3					hauling Easterly.
10	3		E S E	N E		At 6 P.M. Set in thick
11	3					and squally. Furled Light Sails
12	3					th-Gallant Sails & flying Jib.
1	3					
2	3		S E	E N E		At noon blowing a gale from E by E
3	4					and thick weather. Furled
4	5		North			everything but Lower Topsails, reefed
5	6					Foresail & reefed Spanker.
6	6		N E			
7	4					Pumps Carefully attended.
8	4					So. Obs.
9	4					Lat. by C.R. 54. 21.
10	4		N E	E S E		
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 19th day of December 1869
1	2	1	N E by N	E S E	2 pts	
2	2	1				This day Commences with a hard
3	2	1				gale from E. S. E. Thick & squally.
4	2	1				At 4 P.M. cleared up a little
5	3				1 pt.	and moderating. Made Sail as
6	3		N E			required.
7	3					
8	3					Middle hours: Thick & rainy.
9	4					At 4 A.M. By turned out all Reefs
10	4					and set Main T.G.sail.
11	4			S E		
12	4					Latter part of the day moderate
1	5					from S. Eastward and cloudy.
2	5					Made all Sail.
3	5					
4	6					Pumps well attended.
5	6					
6	6			S E by E		Lat. by Ob. 53. 34.
7	5					
8	5					48 days out.
9	5					
10	5					
11	5		"	"		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 20th day of December 1869
1	5		N E	S E		
2	5					
3	5					Throughout this day wind from
4	5					S E to S W, varying from moderate
5	5					breez to light airs:
6	5			South		Clear, cloudy weather.
7	5		N E ½ E			
8	4					
9	4					
10	4			S W		At 5 A.M. Spoke the English Bark
11	4					Charles & Edward from Callao
12	4					bound to Martinique.
1	4					
2	5		— " —			Pumps attended.
3	2					
4	2					
5	1	1				
6	1	1		S E		Lat. by Ob. 52. 46.
7	1	1				
8	1	1				
9	2					
10	2			E S E		
11	2		— " —			
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 21st day of December 1869
1	3		North	E N E		
2	3					
3	3					
4	3					
5	3					
6	3					Moderate breez from East and
7	3					E N E and cloudy weather all
8	3		N N E	East		this day.
9	5					
10	5					Killed a PIG.
11	5					
12	5					
1	5					Three Casks and a ship in company.
2	5					
3	5					
4	5					
5	5		N E	E N E		
6	5					
7	5					
8	5					
9	4					
10	4					
11	4		"	"		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 22½ day of December 1869
1	3		S E	E S E		
2	3					
3	3					This day commences with the Wind moderate from E. S. E and pleasant weather.
4	2					
5	2					
6	2					
7	3					
8	3			South		
9	3		N E ½ E			Middle hours: Light S. Easterly airs and calm. Kept reeled.
10	3					
11	3			S E		
12	2					
1	1		— — — —			Latter part of the day wind very light from S. & S. W. with frequent light rain-squalls.
2			Calm			
3						
4						
5						
6						All Sail set.
7						
8	1			S. & W.		Lat. by D. R. 50.50.
9	3					
10	3					
11	3					
12	3		— " —			

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
S ½ E	128	14-32	6-20	43-24	42-118	1½	16 E	28-36	15-34

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 23½ day of December 1869
1	5		S E ½ E	S. W.		
2	5					First part of this day moderate breez from S. W. a fine heather.
3	5					
4	5					
5	5					
6	5			W. S. W.		Middle hours: Much the same.
7	5					
8	5					
9	5					
10	5					
11	5		— " —	S. W.		Latter part of the day wind
12	5					fresh from S. & S. W. and cloudy.
1	5					
2	5					
3	5					
4	5					Pumps well attended.
5	6					
6	6					
7	6			S. S. W.		So. Ak.
8	6					Lat. by D. R. 49.55.
9	6	1				
10	6	1				
11	6	1				
12	6	1	— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 24½ day of December 1869
1	7		N E ½ E	S. S. W.		
2	7					Comes in with the wind fresh from S. S. W. and Cloudy weather.
3	7					
4	7					
5	6					First part of the night Thick and Squally. Furled the Royals and Set to sail.
6	6					
7	6					
8	6					
9	6					
10	6					At 6 A. M. Wind increased to a gale. Furled Up-Gallant-sails and Mainsail. Reefed Upper T'sails & Foresail.
11	6					
12	6		— " —	— " —		
1	6					
2	6					Heavy sea on. Ship Taking board much water.
3	6	1				
4	6	1				At noon: Gale Moderate.
5	6	1				Turned reefs out and set Main Up-gal-
6	6	1				sail and reefed Mainsail.
7	4					Thick rainy weather.
8	4					
9	4					Pumps Carefully attended.
10	4					So. Ak.
11	4		— " —	— " —		Lat. by D. R. 49.15.
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 25th day of December 1869
1	4		S E ½ E	S ½ W		First part of this day fresh gales from S ½ W and thick weather. Set Fore- Up-Gallant Sail. — Middle hours: moderate & thick. Split Fore- Up-Gallant Sail.
2	4					
3	4					
4	4					
5	4					
6	4					At 6 A. M. Wind increased to a gale. Furled Up-Gallant-sails, reefed the upper T'sails and Fore-sail and furled Jib & Mainsail.
7	4	1				
8	4	1				
9	4	1				At 7 Gale increasing, Took in everything except the Lower T'sails and reefed Trysail.
10	4	1				
11	5					At 10 Carried away the Fore Main T'sail yard in the weather Shear-pole. Cleared
12	5		— " —	— " —		up the Sail and secured the yard and
1	5					set the Lee clew.
2	5					Took in the Fore- T'sail. Having a violent
3	5					gale from South with terrific Squalls.
4	5					Ship Labouring heavily and
5	5					taking board much water.
6	4					
7	4				10 M.	Pumps Strictly attended.
8	4					
9	2		E S E	South	6 Hrs	Lat. by D. R. 48.55.
10	2					
11	2				6 Hrs	
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.
1					
2					
3					
4					
5					
6					
7	1		A.E	S.W	
8	1				
9	1				
10	1				
11	1				
12	1		A.S.E		
1	1				
2	1				
3	1				
4	1			West	
5	1				
6	1				
7	1				
8	1		A.E.f.S		
9	1			S.W	
10	1				
11	1				
12	1				

REMARKS. 26th day of December 1869

This day begins with a fresh gale from South & light sea running. Employed bracing yards and taking in main water.

At 6 P.M. Wind suddenly died out and shifted to S.W. Set the lower T'gall's & reefed topsail. First part of the night fresh gales from S.W. Sea going down.

At 4 A.M. Wore ship to the Southward. Made sail according and at 9 A.M. had everything set but the Royals.

The day ends with moderate breezes from S.W. and clear weather.

Set the Royals.

Pumps well attended.

Lat. by Obs. 48.89

55 days out.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.
1	4		A.E.	A.S.	
2	4				
3	4				
4	4				
5	4				
6	5				
7	5			West	
8	5				
9	5				
10	5				
11	5				
12	5				
1	5				
2	5				
3	5				
4	5				
5	5			S.W	
6	5				
7	6				
8	6				
9	6		A.E.f.E	S.f.W	
10	6				
11	6				
12	6				

REMARKS. 27th day of December 1869

First part of this day moderate breezes from S.W. & fine weather.

Middle hours: Wind East, Moderate & fine, bowling Southerly towards morning.

At 7 A.M. Set in thick and rainy. Furled light sails.

Latter part of the day: Fresh gales from S.f.W. & thick weather.

At noon took in the T'gallant sails reefed the Topsails and furled the Mainsail.

Pumps well attended.

Do. Obs.

Lat. by D.R. 47.35.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.
1	3		E.S.E	South	2 pts
2	3				
3	2				
4	2				
5	2				
6	2				
7	2		S.E	S.S.W	
8	2				
9	3	1	S.E.f.S	S.W	
10	3	1			
11	3	1			
12	3	1	—"—		
1	4				
2	4				
3	4				
4	4				
5	4				
6	5				
7	7			S.S.W	
8	7				
9	7	1			
10	7	1			
11	7	1	—"—	—"—	
12	7	1			

REMARKS. 28th day of December 1869

This day commences with a hard gale from Southward & thick weather.

At 2 P.M. Reefed the Topsails & furled Jib.

At 6 P.M. Wore moderate, turned out all reefs, set Jib & trysail.

Middle hours: Moderate fine & hard thick. Set the gallant sails.

At 6 A.M. Wind shifted to S.S.W. Employed bracing. Set all drawing sail.

The day ends with fresh gales from S.S.W & Cloudy weather. Furled the Royals & all fore & aft sails.

Pumps well attended.

Do. Obs.

Lat. by D.R. 46.40.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.
1	7		A.S½E	S.S.W.	
2	7				
3	7				
4	7		A.E.		
5	6				
6	6				
7	5				
8	5				
9	5				
10	5				
11	4	1			
12	4	1	—"—	—"—	
1	4	1			
2	4	1			
3	4	1			
4	4	1			
5	4			West	
6	4				
7	4				
8	4			A.W	
9	3	1			
10	3	1			
11	3	1	—"—	—"—	
12	3	1			

REMARKS. 29th day of December 1869

First part of the day strong gales from S.S.W. & high sea.

Middle hours: Moderate. Set all drawing sail

Latter part of the day: light S.W. Westerly winds & pleasant weather.

All sail set.

Lat. by Obs. 45.10.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 30th day of December 1869
1	2	1	N. E	N. Westerly		
2	2	1				This day Commences with light N. Westerly airs & fine weather.
3	2	1				
4	2	1				
5	2					
6	1					
7	1		Calm			Middle Doors: Calm.
8						
9						
10						
11						
12						
1	2		N. & W.	N. E.		Latter part of the day Light N. Easterly wind and pleasant weather.
2	2					
3	2					All sail set.
4	2					
5	2					
6	2					
7	4		N by W	N E by E		Lat. by Ob. 44.26.
8	4					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 31st day of December 1869
1	4		N by E	E by N		
2	4					
3	4					
4	4					
5	3					
6	3					Throughout this day light breezes from East to N.N.E and pleasant weather.
7	3		North	E. N.E.		
8	3					
9	3					All sail set.
10	3					
11	3					
12	3					At noon tacked to the Eastward.
1	3		N. N. W.	N. E.		
2	3					
3	3					Lat. by Ob. 48.38.
4	3					
5	3					
6	3					
7	3					
8	3		N. W.	N. N. E.		No more log to visit this year.
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 1st day of January 1870
1	3		E N E	North		
2	2					First part of this day light airs from the Southward & fine weather.
3	2		N E			
4	2					
5	1					
6	1					Middle doors. Light airs & Calms.
7			Calm			
8						
9						
10						
11	1	1	N E by E	North		At 7 A.M. tacked to the N.W. Wind increasing.
12	1	1				
1	3					
2	3		N E	N N W		At 9 A.M. Commenced to reef to sail, and at noon reefed the upper topsails & Foresail. Furled Jib and Mainsail, blowing a gale from N.E.
3	3					
4	2					
5	2		E N E	North		Pumps well attended.
6	2					
7	3		East			
8	3					
9	5		N by W	N E		No. Obs.
10	5					Lat. by D.R. 43.00.
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 2d day of January 1870.
1	4		E by S	N N E	4 pts	This day commences with a hard gale from N.N.E. At 10 A.M. hoisted the upper topsails a reef in.
2	2					At 3 P.M. Had a very heavy squall with torrents of rain. Furled the Foresail.
3	2					At 4 Wind shifted to N.N.W and continued to increase, blowing a very gale.
4	2					At 5 P.M. Shipped a heavy sea Knocking
5	2		N E by E	N N W		in about three feet of the Bulwarks &
6	2					the pop and washing overboard everything
7	2					moveable from the deck.
8	2					At 8 P.M. Took in the weather clues of the lower topsails
9	2					blowing a tempestic gale with tremendous heavy
10	2					squalls. Very heavy sea running. Ship
11	2					laboring heavily and shipping much water
12	1					
1	2		N. N. E.	Sailed 3 1/2 Knots. Leeway 6 pts.		At noon no signs of the gale abating.
2	2					
3	2					Pumps constantly attended.
4	2					
5	2					Lat. by D.R. 48.10.
6	2					
7	2					62 days out.
8	2					
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3d day of January 1870
1				N.W.		This day commences with terrific gales from N.W. and tremendous sea on. Shipping and stowing bad. At 8 A.M. Moderated a little but still blowing a very severe gale. At the Inner Main-Topsail also, and looking to the eastward.
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1				West		At 4 A.M. Commenced to moderate and sea going down.
2						At 8 A.M. Rec'd on board off Callao and set second upper T'gall. Reefed the Foresail and set it.
3						
4						At noon it had moderated to a strong breeze and clear weather. Turned out all reefs and set the T'gallant sails.
5						
6						Find that the leaks come in the upper works & water-ways.
7						
8						Pumps strictly attended.
9	6		S.E. by E.	N.W. by W.		Lat. by Obs. 42.87
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of January 1870
1	6	/	S.E. by E.	West		First part of this day Stormy gales from West and Lazy sea on.
2	6	/				
3	6	/				
4	6	/				
5	6	/				
6	6	/				
7	6	/		N.W. by W.		Kept down into the between decks and found considerable Between and some water on the Starboard side. all Hands employed taking it out.
8	6	/	S.E.			
9	6	/				
10	6	/				
11	6	/		N.W.		Middle Doors: Thick Rainy Weather. Wind Veering to the Eastward.
12	6	/				
1	6	/				
2	6	/				
3	6	/		N.W. by W.		At 6 A.M. Set in thick and wind increased. Furled T'gallant sails.
4	6	/	S.E. by E.			At 10 Reefed the Courses and upper T'sails, blowing a gale from N.N.W. & thick weather.
5	6	/				
6	6	/				
7	6	/				
8	6	/				Pumps carefully attended.
9	5					Lat. Obs.
10	5					Lat. by D.R. 41.10.
11	5					
12	5		— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 5th day of January 1870
1	4		N.E.	N.N.W.		
2	4					First part of this day Stormy gales from N. Westward & Lt. & Cloudy weather.
3	4					
4	4			N.W.		
5	5					
6	5					Middle Doors: Thick & Rainy.
7	5			W.N.W.		Blowing a gale from W.N.W.
8	5					
9	5					
10	5					At 2 A.M. Wind Veered to W.S.W.
11	5					Cleared up and moderated.
12	5					
1	5					At 4 A.M. turned out all reefs and set T'gallant sails,
2	5					and at 6 set all drawing sail.
3	5					
4	5			W.S.W.		The day ends with moderate breeze from W.S.W. and fine weather.
5	6		N.E. by N.			
6	6					Pumps well attended.
7	6					
8	6					Lat. by Obs. 39.54.
9	6					
10	6					
11	6		— " —	— " —		
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 6th day of January 1870
1	4	/	N.E. by N.	W.S.W.		
2	4	/				Throughout this twenty-four hours light Winds from W.S.W. to South and pleasant weather.
3	4	/				
4	4	/				
5	4					All drawing sail set.
6	4					
7	4					
8	4					Pumps Attended.
9	4					
10	4					
11	4					Lat. by Obs. 38.37.
12	4		— " —	W.S.W.		
1	4					
2	4					
3	4					
4	4					
5	3	/				
6	3	/				
7	3	/				
8	3	/				
9	3					
10	3			South		
11	3					
12	3		— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	2	/	N.E.f N.	S.E.		7th day of January 1870
2	2	/				
3	2	/				
4	2	/				
5	2	/				Light breezes from S.E. to E.f N. and pleasant weather all this day.
6	2	/				
7	2	/				All Sail Set.
8	2	/				
9	3		N.N.E. East			
10	3					Crew Variously employed.
11	3					
12	3					
1	3					
2	3					Pumps Attended.
3	3					
4	3					
5	3		N.f E	E.f N.		Lat.f Obs. 36.34.
6	3					
7	5					
8	5					
9	5					
10	5					
11	5		— " —	— " —		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		N.f E	E.f N.		8th day of January 1870
2	3					
3	3					
4	3					
5	3					Light Easterly airs and Calms all this twenty-four hours.
6	3					
7	3					Barm pleasant weather.
8	3					
9	2					All Sail Set.
10	2					
11	1					
12	1					
1			Calm			
2						
3						
4						
5						
6						Lat.f Obs. 36.45.
7	1					
8	1					
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		N.f E	E.f N.		9th day of January 1870
2	3					
3	3					First part of this day light airs from the Eastward and pleasant weather.
4	3					
5	3					
6	3					
7	3					
8	3					At Midnight wind darling Westerly. Blew a little strong with passing clouds. Furled the Royals.
9	4		North	E.N.E.		
10	4					
11	4					
12	4					
1	4		N.N.W.	N.E.		Latter part of the day pleasant breze from N.E with ~~passing clouds~~ occasional light rain-squalls.
2	4					
3	4					
4	4					
5	4					Lat.f Obs. 35.43
6	4					
7	5					69 days out.
8	5					
9	5					
10	5					
11	5		— " —	— " —		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		N.W.	N.N.E.		10th day of January 1870
2	5					
3	5					This day commences with fresh breze from N.E to North and cloudy. Set the Royals.
4	5					
5	5		E.N.E	North		At 4 P.M. tacked to the East'd.
6	5					
7	5					Middle hours. Moderate Northerly breze & overcast.
8	5					
9	5					
10	5					The day ends with fine breze from N.N.W and pleasant.
11	4		N.E.f E			
12	4					All Sail Set.
1	4					
2	4		N.E	N.N.W.		Pumps Attended.
3	4					
4	4					Lat.f Obs. 34.42.
5	4					
6	4					
7	5					
8	5					
9	5					
10	5					
11	5		— " —	— " —		
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 11th day of January 1870
1	5		S.E.½E.	S.S.W.		
2	5					
3	5					First part of this day fresh breezes from S.S.W. & Clear.
4	5					
5	6					
6	6					
7	6					
8	6					Middle hours Ditto the same increasing towards morning.
9	6					At 8 A.M. Took in Light Sails.
10	6					
11	6					
12	6		—"—	—"—		
1	6					The day ends with fresh gales from S.S.W and cloudy.
2	6					
3	6					
4	6					Pumps well attended.
5	6	1				
6	6	1		S. by W.		
7	6	1				
8	6	1				Lat. by Obs. 36.33.0 S.
9	6	1				
10	6	1				
11	6	1	—"—	—"—		
12	6	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 12th day of January 1870
1	6		S.E.½E.			
2	6					This day commences with
3	6					strong Southerly winds and
4	6					cloudy weather.
5	6					
6	6					Middle hours: Ditto.
7	6					
8	6					
9	7					
10	7					Latter part of the day a little
11	7					more moderate, Wind veering
12	7					to the Eastward. Clear weather.
1	7					
2	7					At 10 A.M. Set the Main Royal.
3	7					
4	7					Pumps Attended.
5	6		E.N.E.			
6	6					
7	6					Lat. by Obs. 31.43.
8	6					
9	6					
10	6					
11	6		—"—			
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 13th day of January 1870
1	7		E.N.E.	North		This day begins with strong
2	7					Northerly winds and clear.
3	4					At 2 P.M. Bent second
4	4					furled top-gallant sails & flying jib.
5	4					
6	4					First part of the night. Squally,
7	4	1				threatening appearances in the East.
8	4	1				At 11 P.M. had a
9	4	1				very heavy squall with much rain.
10	4	1				Furled upper topsails, Main sail,
11	4					Jib & Spanker.
12	3					At 4 A.M. Bent and shifted to
1	2					West and moderate. Made
2	2					sail accordingly.
3	2					The day ends with baffling airs
4	2					from West to North and Rainy.
5	2		N.E.½E.	West		Regulus Goldsmith
6	2					
7	2					Pumps Attended.
8	1			to		No Obs.
9	1					Lat. by G.R. 31.06.
10	1			North		
11	1					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of January 1870.
1	2		N.E.½E.	N.W.		
2	2					First part of this day, light
3	2			to		baffling airs from N.W. to North
4	2					and raing.
5	1		N.E.½E.	North		
6	1					
7	3					Middle hours: Light Breezes
8	3					hazy and Cloudy. No rain.
9	3		N.E.½N.	N.W.		Made all sail.
10	3					
11	3					
12	3					
1	3		N.N.E.			Latter part of the day, baffling
2	4			West		airs from West to S.W. & cloudy.
3	4					
4	3					
5	3					No Obs.
6	3					Lat. by G.R. 30.06
7	3					
8	3			S.W.		
9	2					
10	2					
11	2		—"—	—"—		
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 15th day of January 1870
1	5		N.N.E.	S.W. to S.		This day commences with light S. W. to S. breezes and cloudy weather.
2	5					
3	5					
4	5					
5	5					
6	5					
7	5					
8	5					
9	5					
10	5					
11	5					
12	5					
1	1	1				
2	1	1				Middle & latter parts light airs and calms. Clear weather and hot.
3	1	1	"	"		
4	1	1	Calm			Saw ships in Company.
5						
6						Lat. by Ob. 29.47.
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS	LEEWAY.	REMARKS. 16th day of January 1870
1			Calm			This day commences Calm. At 2 P.M. Set a breeze from S.E. inclining at night.
2	2		N.N.W. N.E.			
3	2					
4	2					Middle parts: Fresh a squally. Furled Royals and Set Topsails.
5	2					
6	2					At 8 P.M. Tacked Ship. Set the Set Topsail and Main Royal.
7	2					
8	2					
9	2					
10	2					
11	2					
12	2					
1	6		N.W. by W.			The day ends with fresh breezes from the Southward and clear weather.
2	6					
3	5					
4	5					Pumps attended.
5	5		N.N.W. North			
6	5					Lat. by Ob. 29.00.
7	5	1				
8	5	1				76 days out.
9	5	1	N.E. by E.			
10	5	1				
11	5	1				
12	5	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lcn.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 17th day of January 1870
1	5		N.E. by E.			Throughout this twenty-four hours moderate Northerly Wind and pleasant weather.
2	5					
3	4					
4	4					
5	4					
6	5					
7	5					
8	5		E.N.E.			All Sail set.
9	5					
10	5					
11	4					At 6 A.M. Tacked to the N.N.
12	4		E. by N.			
1	4					Pumps attended.
2	4					
3	4					
4	4					
5	4					Lat. by Ob. 28.19.
6	4					
7	5		N.N.W.			
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 18th day of January 1870
1	4	1	N.N.W. by W.			All this day very light winds from N.N.E. to W.N.W. and clear weather.
2	4	1	E. by N.			
3	4	1				
4	4	1				
5	4					
6	4		N.W.			Tacked Ship frequently as occasion required.
7	4					
8	2	1				
9	2	1	E.N.E.			All Sail set.
10	2	1				
11	2	1				
12	2	1				
1	2					
2	2		N.E. by E.			Lat. by Ob. 27.51.
3	2					
4	2					
5	2		N.E.			
6	2					
7	2					
8	2					
9	1	1				
10	1	1				
11	1	1				
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 19th day of January 1870
1						
2						
3						Throughout this day dead Calm. Ship not doing
4						any Steerage way.
5						Clear weather and Very Hot.
6						
7						Unbent all the new Sails and
8						bent the light weather ones.
9						
10						Stowed 17 miles Southerly Current.
11						
12						
1						Lat. by Obs. 27. 46.
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 20th day of January 1870
1			Calm			
2						First part of this day: Dead
3						Calm and hazy Wth.
4						
5						Stood 8 P.M. Let a light
6						air from S.E. extend which
7						Continued through the day
8						(S.E. Trades & Hope.)
9						
10						At 2 A.M. passed a Large
11	2		N.E	S.E.		ship standing to the S.W.
12	2					
1	2					
2	2					All hands employed on rigging
3	3					Sleeping masts &c. &c.
4	3					
5	3					
6	3					
7	3					
8	3					
9	3					
10	3					
11	3		"	"		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 21st day of January 1870
1	4		N.E	S.E		
2	5					This day commences with
3	5					light E. & fine weather.
4	5					
5	5			E.S.E.		
6	5					
7	5					
8	5					Middle hours: Fine breeze from
9	5					E.S.E. and passing clouds.
10	5					At Midnight had a rain-squall.
11	5					
12	5		— " —			
1	5					Latter part of the day moderate
2	5					from East and clear weather.
3	5					
4	5					All sail set.
5	4	/				Pumps Attended.
6	4	/		East		
7	4	/				Lat. by Obs. 25. 12.
8	4	/				
9	4	/				
10	4	/				
11	4		— " —	— " —		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 22nd day of January 1870
1	4		N.E	East		
2	4					First part of this day light
3	4					Easterly winds and clear weather.
4	4					
5	4					
6	4					
7	4					Occasional light rain-squalls
8	4					through the night.
9	3					
10	3					
11	3					
12	3					Latter part of the day mod.
1	3					very light from N.E. Clear
2	3					and hot.
3	3		N.N.E	E.N.E		
4	3					
5	2	/	N.E			Lat. by Obs. 24. 04.
6	2	/				
7	2	/				
8	2	/				
9	2	/	N.N.E	N.E		
10	2	/				
11	2	/				
12	2	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 23d day of January 1870
1	1	1	N.E.			
2	1	1				
3	1	1				
4	1	1				
5	1	1				
6	1	1				
7	1			East.		Throughout this day light airs from S.E. to East and pleasant weather.
8	2					
9	2	1				
10	2	1				Had a shower of rain at 2 P.M.
11	2	1				
12	2	1	— " —			All sail set.
1	2	1		S.E. by E.		
2	2	1				Sat. J Ob. 23.19.
3	2	1				
4	2	1				83 days out.
5	2					
6	3					
7	3					
8	3					
9	3					
10	3					
11	3		— " —			
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 24th day of January 1870
1	4		N.E.	East		
2	4					
3	4					
4	4					
5	3					Moderate breezes from East to N.E. all this twenty-four hours and passing clouds.
6	2		North	E.N.E.		
7	1					All sail set.
8	1					
9	2					
10	2					
11	2					
12	2					Carpenter fitting S.B. boat
1	4		N.E. by E.			Eighteen miles.
2	4					
3	4					
4	4					
5	5		N.N.E.	N.E.		Sat. J Ob. 22.11.
6	5					
7	5					
8	5					
9	5	1				
10	5	1				
11	5	1	— " —	— " —		
12	5	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 25th day of January 1870
1	5		N.E. by N.	N.E. by E.		
2	5					First part of this day moderate breze from N.E. by E. and clear weather.
3	5					
4	4					
5	3					
6	3					
7	3		N.N.E.			
8	2					Middle hours: Light a topping from N.E. to N.N.E. with frequent showers of rain.
9	2			E.N.E.		
10	2		N.E. by N.			At 2 A.M. Had a very heavy shower.
11	2					
12	3					The day ends much the same as it began, moderate & clear.
1	4					
2	4					All sail set.
3	4					
4	4					Sat. J Ob. 21.16.
5	4					
6	4	1	N.N.E.			
7	4	1				
8	4	1				
9	4	1	N.N.E. by E.			
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 26th day of January 1870
1	3		N.N.E.	N.E.		
2	3					All this day light winds from N.E. and E.N.E. and clear weather.
3	3					
4	3					All sail set.
5	2					
6	2					
7	3					
8	3					
9	4		North	E.N.E.		All hands employed, at work on rigging, scraping masts &c.
10	4					
11	4					
12	4					
1	4					Pump Attended.
2	4					
3	4					
4	4					
5	4	1	N.E.			Sat. J Ob. 20.06.
6	4	1				
7	4	1				
8	4	1				
9	4	1				
10	4	1				
11	4	1	— " —	— " —		
12	4	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 27th day of January 1870
1	3		N½E	E.N.E		
2	3					This day commences with moderate breezes from E.N.E and fine weather.
3	3					
4	3					
5	3					
6	3					
7	2					
8	2					At Midnight, baffling and squally with rain.
9	2		N.E	East		
10	2					Split Mizen Staysail in a squall.
11	3					
12	3					
1	4					Latter part of the day light S. Easterly airs & Calms.
2	4					Dark, Cloudy weather.
3	4					
4	4					So Obs.
5	2					Lat. by D.R. 19.18.
6	0					
7	0					
8	2		N.N.E.	N.E		
9	1					
10	1					
11	0					
12	0		— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 28th day of January 1870
1	2		North	E.N.E.		
2	3					First part of this day light breze from E.N.E & Cloudy.
3	3					
4	3					
5	3					
6	3					
7	3					At Midnight wind East and Squally, blowing Peak at times. Black, heavy
8	4		N.E	East		Clouds passing over.
9	4					
10	4					
11	4					
12	4					
1	4	1				Latter part of the day, fine
2	4	1				steady breze from E.N.E
3	4	1				and pleasant weather.
4	4	1				
5	4		North	E.N.E		All sail set.
6	5					
7	5					
8	5					Lat. by Ob. 17.46.
9	5					
10	5					
11	5					
12	5		— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 29th day of January 1870
1	4		N.E	East		
2	4					Brought to this day with
3	4					breze from East to E.S.E
4	4					and pleasant weather.
5	4					
6	4					All sail set.
7	4					
8	4					
9	5					
10	5					All hands employed on
11	5					rigging &c &c.
12	5		— " —			
1	5					
2	5					
3	5					Pumps Attended.
4	5			E.S.E		
5	6					
6	6					Lat. by Ob. 15.45.
7	6					
8	6					
9	6			East		
10	6					
11	6		— " —	— " —		
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 30th day of January 1870
1	5		N.E	East		
2	5					
3	5					
4	5					Fine steady breze from the
5	5					Eastward all this day.
6	5					Clear weather and Hot.
7	5					
8	5					
9	5					
10	5					
11	5		— " —	— " —		
12	5					
1	5					Lat. by Ob. 13.46.
2	5					
3	5					
4	5					90 days out.
5	5					
6	5					
7	5					
8	5					
9	5					
10	5					
11	5		— " —	— " —		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 31st day of January 1870
1	5	/	North	East		
2	5	/				
3	5	/				
4	5	/				
5	5	/				Moderate, steady trades from East and fine clear weather throughout the day.
6	5	/				
7	5	/				All sail set.
8	5	/				
9	5	/				
10	5	/				
11	5	/				
12	5	/	—"—	—"—		
1	5	/				
2	5	/				
3	5	/				
4	5	/				Sat. Obs. 11.48.
5	5	/				
6	5	/				
7	5	/				
8	5	/				
9	5	/				
10	5	/				
11	5	/				
12	5	/	—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 1st day of February 1870
1	5		North	East		
2	5					
3	5					
4	5					This day commences with fine, steady breys from East and pleasant weather.
5	5					
6	5					
7	5					
8	5					
9	5					
10	5					Middle hours. Moderate.
11	4		—"—	—"—		
12	4					
1	4					
2	4					Latter part of the day. Much the same as the first.
3	4					Clear weather and hot.
4	4					
5	4					
6	4					
7	5					Sat. Obs. 9.50.
8	5					
9	5					
10	5					
11	5		—"—	—"—		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 2nd day of February 1870
1	5		North	East		
2	5					
3	5					Moderate trades from East to E.S.E and fine weather.
4	5					
5	5					
6	4					Set quite as much sail through the night as in the day-time
7	4					
8	4					
9	4			E.S.E		
10	4					
11	4					At daylight saw a large ship bound to the Southward.
12	4					
1	4		— " —	— " —		
2	4					
3	4					Carpts Attended.
4	4					
5	4					
6	4					
7	4			East		Sat. Obs. 8.07.
8	5					
9	5					
10	5					
11	5		—"—	—"—		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3rd day of February 1870
1	5		North	East		
2	5					
3	5					This day commences with good breys from East and pleasant weather.
4	5					
5	5					
6	5					
7	4					Middle hours. Moderate and cloudy. Wind veering Southerly.
8	4					
9	4					
10	4					
11	4					At daylight saw a French Bark bound to the Southward.
12	4		—"—	—"—		
1	4					
2	4					Latter part of the day moderate breys from S.E with occasional slight rain-squalls.
3	4	/		S.E		
4	4	/				
5	4	/				All sail set throughout.
6	4	/				
7	4	/				
8	4	/				Sat. Obs. 6.55.
9	4	/				
10	4	/				
11	4	/	—"—	—"—		
12	4	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of February 1870
1	4		S.S.W.			
2	4					
3	4	/				This day commences with light
4	4	/				S. Easterly winds and cloudy.
5	4	/				
6	4	/				Middle hours. light baffling
7	4	/				airs with frequent heavy
8	4	/				showers of rain.
9	4				S. East'd	
10	4					
11	4					
12	4		— " —			
1	4					Latter part of the day fine
2	4					breez from S.E and pleasant
3	4					weather.
4	4					
5	4					All drawing Cal Ast.
6	4					
7	4					Lat. of Ob. 5.06.
8	4					
9	4					
10	4					
11	4		— " —			
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 5th day of February 1870
1	4	/	S.S.W.	S.S.E.		
2	4	/				Throughout the twenty-four
3	4	/				hours moderate, steady
4	4	/				breez from S.S.E and
5	4	/				pleasant weather.
6	4	/				
7	4	/				All drawing Cal Ast.
8	4	/				
9	4	/				Commenced to paint ship.
10	4	/				
11	4	/				
12	4	/	— " —	— " —		
1	4	/				
2	4	/				
3	4	/				
4	4	/				
5	4	/				
6	4	/				Lat. of Ob. 4.14.
7	4	/				
8	4	/				
9	4	/				
10	4	/				
11	4	/	— " —	— " —		
12	4	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 6th day of February 1870.
1	4	/	S.S.W.	S.S.E.		
2	4	/				This day commences with moderate
3	4	/	S.W.b.S.			breez from S.S.E.
4	4	/				
5	4	/				At 1 P.M. made Fernando
6	4	/				de Noronha bearing S.W.b.W.
7	4					dist about thirty miles.
8	4					At 7 P.M. Fernando de Noronha
9	4		S.S.W.			by S.b.E Compass dist 6 miles.
10	4					
11	4					Middle hours. Moderate & cloudy.
12	4					
1	4	/				At 6 A.M. Bird shifted to
2	4	/				S.S.E with rain.
3	4	/				
4	4	/				Latter part of the day calm & rainy.
5	4	/				
6	4	/				(Nice for paint)
7	4					Do. Ob.
8	4		S.W.	S.S.E		Lat. of C.R. 3.10.
9	4					
10			Calm			97 days out.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 7th day of February 1870
1			Calm			
2						This day commences calm and
3	—	—				cloudy. At 9 A.M. Set a light air
4	1		S.W.b.W.	S.S.E.		from S.S.E
5	1	/				
6	1	/				Middle hours light airs with frequent
7	1	/				rain-squalls.
8	1	/				
9	2					The day ends with the wind
10	2					moderate from S.S.E and
11	2					fine weather.
12	2		— " —	— " —		
1	2					All drawing Cal Ast.
2	2					
3	2					
4	2					
5	3					Lat. of Ob. 2.26.
6	3					
7	3					
8	3					
9	4					
10	4					
11	4		— " —	— " —		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

8th day of February 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4	1	N.b.W.t.W.	S.S.E.		
2	4	1				First part of this day and middle hours; fine breezes from S.S.E. and cloudy.
3	4	1				
4	4	1				
5	4	1				
6	4	1				
7	4					
8	4					
9	4					
10	5					Latter part of this day baffling from South to East with much rain.
11	5					
12	5		—"—	—"—		
1	5					
2	5					
3	5					All drawing sail set throughout.
4	5					
5	4					
6	4					
7	4					
8	4			Baffling		Lat. Obs.
9	5			South		Lat. D.R. 1.20.
10	5			to		
11	5			East		
12	5		—"—			

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

9th day of February 1870

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	5	1	N.N.W.	S.E.		
2	5	1				This day commences with light breze from S.E. & cloudy.
3	5	1				
4	5	1				
5	5	1				
6	5	1				
7	5			E.N.E.		Middle hours, baffling from E.N.E. to S.E. and squally. Sharp Lightning to the Southward Heavy Showers towards morning.
8	5					
9	3					
10	3					
11	3					
12	2			to		Latter part of the day moderate from S.E. and pleasant. Clear Clouds hanging to the Southward.
1	2	1	—"—			
2	2	1				
3	2	1				
4	2	1				
5	5			S.E.		Pumps Attended.
6	5					
7	5					
8	5					Lat. Obs. 0.15
9	5					
10	5					
11	5		—"—	—"—		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

10th day of February 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		N.N.W.	E.S.E.		
2	3					First part of this day light breze from E.S.E. and cloudy.
3	3					
4	3					
5	3					
6	3					Middle hours: light baffling airs and Calms.
7	3					
8	3					
9	3		N.b.W.	Baffling		Latter part light breze from S.E. & pleasant. All sail set.
10	1	1				
11	1	1				
12	1	1	N.N.W.			
1	1	1				
2	1	1				At 6 P.M. Crossed the Equator in Long. 36.50
3	1	1				100 days out.
4	1	1				
5	2					
6	3			N.E.		Lat. Obs. 0.39 N.
7	3					
8	5					
9	5					
10	5					
11	5					
12	5		—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

11th day of February 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		N.N.W.	E.N.E.		
2	3					This day commences with light breze from the Eastward and fine weather. Clouding up towards night.
3	3					
4	3			E.S.E.		
5	2	1				
6	2	1				
7	2	1				
8	2	1				Middle hours. Light baffling airs from South to S.E. with very heavy rain Showers.
9	2					
10	2					
11	2					
12	2		—"—			About 10 A.M. clear'd up with a light air from East. very hot. and so ends the day.
1	1	1		Baffling		
2	1	1				
3	1	1				
4	1	1				
5	2					
6	2					
7	2					
8	2					
9	2					Lat. Obs. 1.24.
10	2			East		
11	1					
12	1		—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 12th day of February 1870
1			Calm.			This day Commences Calm and Cloudy. At 6 P.M. Light airs from the Eastward and saing.
2						
3						
4						
5						
6						
7	2		North East			Remainder of the day Light & baffling until 8 at 8 S.W.
8	2					
9	2	1				
10	2	1				
11	1					
12			Calm.			The day ends with Light breezes from S.E and cloudy.
1						
2						
3	1		North East			At 8 Laid Set.
4	2					
5	2					Sat. 6 Obs. 1.52.
6	2					
7	1					
8	1					
9	3		S.S.W. S.E			
10	3					
11	4					
12	4		"	"		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 13th day of February 1870
1	2		S.W	East'ly		Throughout This day Light airs from East to S.E and Clear weather.
2	2					
3	1					
4	1					
5	1					
6	1					
7	2					
8	3					
9	2		North			Heavy Swell from S.E.
10	2					
11	1	1				Compass Attended.
12	1	1				
1	1	1				
2	1	1				
3	1	1				
4	1	1				
5	1	1				Sat. 6 Obs. 2.25.
6	1	1	S.S.W S.E			104 days out.
7	1	1				
8	1	1				
9	1	1				
10	1	1				
11	1	1				
12	1	1	"	"		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of February 1870
1	2		S.S.W.	S.E.		First part of this day Light S. Easterly breze & Pleasant.
2	2					
3	2					
4	3					
5	3					
6	3					
7	3		S. W.	S.S.E.		Latter part of the night baffling airs all round the Compass and saing.
8	4					
9	4					
10	4		S.S.W.	S.E.		
11	5					
12	5					At 6 A.M. Set a light breze from S.E and Cleared up. The day ends Pleasant.
1	1		South			
2	1					
3	0					
4	0					
5	0					Caught two Dolphins.
6	0					
7	3					
8	3		S.S.W	S.E		Sat. 6 Obs. 3.00.
9	4					
10	4					
11	4		"	"		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 15th day of February 1870
1	2		S.S.W	S.E.		Light airs from S.E to S.S.E. all This day. At times nearly Calm.
2	2					
3	2					
4	2					
5	2					
6	2					
7	2					
8	2					
9	1	1	S.S.W			Clear weather and very hot.
10	1	1				
11	1	1				
12	1	1				
1	1	1				
2	1	1				
3	1	1				
4	1	1				
5	1	1				
6	1	1				
7	1	1				
8	1	1	S.W	S.S.E		Sat. 6 Obs. 3.20.
9	1	1				
10	1	1				
11	1	1				
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

16th day of February 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	2		N.W.	N.N.E.		This day commences with light N.E. Easterly winds & fine
2	2					Gualy appearances towards night.
3	2					At 7 P.M. Wind shifted to S.E. and rained hard until
4	2					about 10.
5	2					Remainder of the night calm.
6	2		N.W.W. N.E.			
7	3	1				
8	3	1	N. with S.E.			
9	3					
10	3					
11			Calm.			
12						
1						
2						
3						
4						
5						
6						
7	2		N. by W.			At 7 A.M. Set a light breeze from N. Eastward with which the day ends.
8	2					
9	2		N.N.W. N.E.			Lat. by Ob. 3.05.
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

17th day of February 1870

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	2		N by E			Wind N. Easterly all this day and from light airs to fresh breze. Cloudy weather throughout. All Sail Set.
2	2					
3	2					
4	2					
5	2					
6	3					
7	3		N.W.			
8	3					
9	4		N by E			
10	4					
11	4					
12	4					
1	3					
2	3					
3	2					
4	2					
5	3					
6	3		N.N.W.			
7	4					
8	4					
9	5		N by E.			
10	5					
11	5					
12	5					

Caught two Cape Albicores.

Lat. by Ob. 4.50.

N. East Do.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

18th day of February 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		N.N.E. 1/2 E.	N.E.		
2	6					This day commences with strong breze from N.E with passing showers.
3	6					
4	6					
5	6					
6	6					
7	6					Middle hours: Hauls gaff and hoists Royals & Stays'l Stays'l.
8	6					
9	6					
10	6					
11	6	1				Split Main Top Gallant Sail, and bent the new one.
12	6	1	"	"		
1	6	1				
2	6	1				Latter part of the day more moderate. Set the Royals.
3	6	1				
4	6	1				
5	6	1				Pumps Attended.
6	6	1				
7	6					Lat. by Ob. 6.40.
8	6					
9	6					
10	5					
11	5		"	"		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

19th day of February 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		N.N.W.	N.E.		First part of this day fresh breze from N.E and Clear.
2	6					
3	6					
4	6					
5	6					Split Main Royal. Unbent Fore Royal and bent it for Main and
6	6					
7	5	1				
8	5	1				
9	5	1				Middle & Latter parts of the day fine Steady breze from N.E and Clear Weather.
10	5	1				
11	5	1				
12	5	1	"	"		
1	5	1				
2	5	1				
3	5	1				
4	5	1				
5	5	1				
6	5	1				
7	5	1				
8	5	1				
9	5	1				
10	5	1				
11	5	1	"	"		
12	5	1				

Lat. by Ob. 8.05.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 20th day of February 1870
1	5	/	N.N.W.	N.E.		
2	5	/				
3	5	/				
4	5	/				Fine steady breze from N.E. clear weather with passing clouds all this twenty-four hours.
5	5	/				
6	5	/				
7	5	/				
8	5	/				All sail set.
9	5	/				
10	5	/				
11	5	/				
12	5	/	—"—	—"—		
1	5	/				
2	5	/				
3	5	/				
4	5	/				Sat. Ds. 10.21.
5	6	/				
6	6	/				
7	6	/				111 days out.
8	6	/				
9	5	X				
10	5	/				
11	5	/				
12	5	/	—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 21st day of February 1870
1	6	/	N.N.E.	N.E.		
2	6	/				
3	6	/				
4	6	/				Fresh trades from N.E and clear weather.
5	6	/				
6	6	/				
7	6	/				Considerable sea on board taking aboard a great deal of water.
8	6	/				
9	6	/				
10	6	/				All sail set.
11	6	/				
12	6	/	—"—	—"—		
1	6	/				
2	6	/				Pumps well attended.
3	6	/				
4	6	/				
5	6	/				Sat. Ds. 12.22.
6	6	/				
7	6	/				
8	6	/				
9	6	/				
10	6	/				
11	6	/				
12	6	/	—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 22d day of February 1870
1	6	/	N.N.E	N.E		
2	6	/				
3	6	/				This day commences with fresh trades from N.E and clear weather.
4	6	/				
5	6	/				
6	6	/				
7	5	/		E.N.E.		
8	5	/				Middle hours. Moderate from E.N.E. Light rain squalls towards morning.
9	5	/				
10	5	/				
11	5	/				
12	5	/				
1	5	/				
2	5	/	—"—			Latter part of the day fresh from N.E and Cloudy.
3	5	/				
4	5	/				
5	5	/				
6	5	/				
7	6	/		N.E		Sat. Ds. 15.
8	6	/				
9	6	/				
10	6	/				
11	6	/				
12	6	/	—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 23d day of February 1870
1	5	/	N.N.E	N.E.		
2	5	/				
3	5	/				First part of this day fresh breze from N.E and Cloudy.
4	5	/				
5	5	/				
6	5	/				
7	5	/				
8	5	/				East Fore Royal.
9	5	/		E.N.E.		
10	5	/				Middle hours: Breze moderate and pleasant: Wind Easterly Easterly.
11	5	/				
12	5	/	—"—			
1	5	/				
2	5	/				Latter part of the day light breze from East and fine weather.
3	5	/		East		
4	5	/				
5	W	/				All sail set.
6	W	/				
7	W	/				
8	W	/				
9	W	/				Sat. Ds. 15.46.
10	W	/				
11	W	/				
12	W	/	—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 24th day of February 1870
1	5		N.W. & N.	East		
2	5					
3	5					This day commences with fine breezes from East and pleasant.
4	5					
5	5					
6	5					
7	5					
8	5					Middle hours: Ditto.
9	5	/				
10	5	/				
11	5	/				
12	5	/	— " —	— " —		
1	5	/				Latter part of the day wind light from E.S.E.
2	5	/				
3	5			E.S.E.		
4	4					All Sail Set.
5	4	/				
6	4	/				
7	4	/				Sat. Ob. 17.19.
8	4	/				
9	4	/				
10	4	/				
11	4		— " —	— " —		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 25th day of February 1870
1	4		N.N.W.	S.E.		
2	4					
3	4					Light breezes from S. Eastward all this day.
4	4					
5	4					
6	4					Latter part Cloudy.
7	4					
8	4					
9	4					
10	4					All drawing Sail Set.
11	4					
12	4		— " —			
1	4					
2	4			S.S.E.		
3	4					
4	4					Sat. Ob. 18.48.
5	4					
6	4					
7	4					
8	4					
9	4					
10	4					
11	4		— " —	— " —		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 26th day of February 1870
1	3		N.W.	South		
2	3					
3	3					This day begins with the wind very light from the Southward and pleasant weather.
4	3					
5	2			S.S.W.		
6	2					
7	2					
8	2					Middle hours: Light S. Westerly airs and Cloudy.
9	2	1				
10	2	1				
11	2	/				At 6 N.W. Wind shifted to N.W. afterwards veering back to the Westward.
12	2	/				
1	2	/				
2	2	/				
3	2	/				Fore day ends with light airs from W.S.W. and hazy.
4	2	/		S.W.		
5	2	/				Pumps Attended.
6	2	/				
7	4		N.N.E.	N.W.		
8	3					Sat. Ob. 19.33.
9	3		N.W.	W.S.W.		
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 27th day of February 1870
1	2	/	N.W.	W.S.W.		
2	2	/				
3	2	/				First part of this day light airs from W.S.W.
4	2	/				
5	2	/				At Midnight Wind shifted to N.W. Braced round the yards.
6	2	/				
7	2	/				Wind veering Northerly.
8	2	/				
9	1	/				
10	1	/				Latter part of the day. Wind very light from N.N.E and clear weather.
11	1	/				
12	1	/				
1	4		Sky Sail	N.W.		
2	3					
3	3		N.W.	N.N.E.		Saw a Brig bound the same way, also a Schooner bound to the Southward.
4	3					
5	3					
6	3					Sat. Ob. 20.06.
7	3					Lg. 55.50.
8	3					
9	3					118 days out.
10	3					
11	3					
12	3		— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 28th day of February 1870
1	2	1	S.W.b.W.	N.N.E.		
2	2	1				First part of this day light airs from N.N.E.
3	2	1				
4	2	1				
5	2	1				
6	2	1				
7	2	1				
8	2	1				Latter part light pens E.N.E. Pleasant weather and all sail set throughout.
9	2	1				
10	2	1				
11	2	1				
12	2	1	—"—	—"—		
1	2	1				Saw a fore & aft Schoone bound to the Southward.
2	2	1				
3	2	1		N.E.		
4	2	1				
5	2					
6	2			E.N.E.		Lat. f 18.20.8 f.
7	2					
8	2					
9	2					
10	2					
11	2		—"—	—"—		
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 2nd day of March 1870
1	2		N.W.			
2	2					
3	2					
4	2					
5	2					Light airs from S.E. to N.E. and cloudy all this day.
6	2					
7	2					
8	2					
9	1					
10	1					Had a light rain shower about Midnight.
11	1					
12	2		—"—			
1	2					Schooner in sight bound to the S. Westward.
2	2					
3	2					
4	2					
5	2					
6	2					Lat. f 18. 22.00.
7	2					
8	2					
9	2					
10	2					
11	1		—"—			
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS	LEEWAY.	REMARKS. 1st day of March 1870
1	3		N.W.	East		
2	3					This day comes in with light Easterly Wind & pleasant weather.
3	2					
4	2					
5	1					
6	1					First part of the night nearly Calm.
7	1					
8	1					
9	1					
10	1					At Midnight got a light breeze from E.S.E. which Continued through the day.
11	1					
12	2		—"—	S.E.		
1	4					All drawing sail set.
2	4					
3	4					
4	4					
5	3	1				
6	3	1				Lat. f 18. 21.21.
7	3	1				
8	3	1				
9	3	1				
10	3	1				
11	3	1				
12	3	1	—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3rd day of March 1870
1	1		S.W.b.W.	S.S.E.		
2	1					First part of the day light Southerly airs and pleasant.
3	2					
4	3					
5	3					
6	2			South.		Middle hours. Wind S.W. and squally.
7	2					
8	2					
9	2					At 5 N.W. wind shifted to N.N.W with rain.
10	3					
11	3					
12	3					
1	4	1	—"—	S.W.		Ide day ends moderate & pleasant.
2	4	1				All sail set.
3	4	1				
4	4	1				Pumps Attended.
5	4					
6	4		North	N.N.W.		
7	4					
8	4					
9	4	1	N.N.E.	S.W.		Lat. f 18. 22.57.
10	4	1				
11	4	1				
12	4	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of March 1870
1	4		North	N.E.B.E.		This day Commences with moderate breze from N.E.B.E. and pleasant Weather.
2	4					
3	4					
4	4					
5	4					
6	4					
7	4		N.by E			At Midnight fresh breezes and squally. Took in light Sails.
8	4					
9	4					
10	4					
11	4					At 4 A.M. Furled the Gallant sails and reefed the Mainsail.
12	4					
1	4					
2	4		N.N.E.	N.E.		Latter part of the day fresh gales from N. Eastward and Clear Weather. Large Sea on.
3	4					
4	4					
5	4					Pumps well attended.
6	4					
7	4					Lat. / Obs. 24.28.
8	4					
9	4		N.E	N.N.E.		
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 5th day of March 1870
1	4		N.E by E	N.N.E.		This day begins with fresh gales from N. Eastward & Clear.
2	4		by S			
3	4					
4	4					
5	4					At 10 P.M. took in to the Eastward.
6	4					
7	3		by E by N			At 4 A.M. Moderate. Set the Gallant Sails.
8	3					
9	3					
10	3					Middle hours: Moderate from North & cloudy. Set all Sail.
11	3		N.N.E.	North		
12	3					Latter part of the day Calm. Large Sea on.
1	2	1				
2	2	1				Unbent the Mainsail for Repairs.
3	2	1				
4	2	1				
5	2					
6	2					
7	2					Lat. / Obs. 24.31.
8	2					
9			Calm			
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 6th day of March 1870
1			Calm.			
2						
3						First part of this day and middle hours Calm.
4						
5						
6						Retained the Mainsail and lent it again. Bent new Jib and Foresail.
7						
8						
9						
10						
11						At 6 A.M. Set a light breze from N.N.E. with which the day ends. Pleasant weather.
12						
1						
2						
3						
4						
5						
6						Lat. / Obs. 24.47. Lng. 60.10.
7	3		North	N.N.E.		125 days out.
8	3					
9	3					
10	3					
11	3		"	"		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 7th day of March 1870
1	3		N.by W			This day commences with light Westerly wind & pleasant weather.
2	3					
3	3					
4	3					
5	3					Middle hours: Baffling from N.W. to North. Tacked several times.
6	3					
7	2		North			
8	2					
9	2		N.N.E			Latter part: Dry light from North to East. Heavy Calm at noon.
10	3					
11	3					
12	3					
1	2	/				
2	2	/				All hands employed getting the Chains up from the after between decks.
3	2	/				
4	2	/	N.by W			
5	2	/		North		
6	2	/	N.E.B.E			
7	2					
8	2					
9	2			East		Lat. / Obs. 25.18.
10	/					
11	/					
12	/					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 12th day of March 1870
1	4	1	W.S.W.	S.E.		
2	4	1				
3	4	1				
4	4	1				Throughout this day moderate breezes from S.E. to E.S.E and fine weather.
5	4					
6	4					
7	4			East		
8	4					
9	4					Employed making sail.
10	4					
11	4					Varnished the poop deck
12	4					
1	4	1	"	E.S.E.		Set best Starboard Rudder & Some Main-T'gall Sail.
2	4	1				
3	4	1				
4	4	1				
5	4	1				
6	4	1				
7	4	1				
8	4	1				
9	4	1				
10	4	1				
11	4	1	"	"		
12	4	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS	LEEWAY.	REMARKS. 13th day of March 1870
1	5		W.S.W.	E.S.E.		
2	5					First part of this day moderate
3	5					breezes from S.E. to E. and fine.
4	5			S.E.		
5	6					
6	6					Middle hours: Fresh from South
7	6			South		and cloudy. Parted light Sail &,
8	6					at 8 A.M. set them again.
9	7					
10	7			S.S.W.		
11	8					
12	8					Latter part: Stony wind from
1	8		S by W			S.S.E and squally.
2	8					At noon took in light Sail
3	7					and Fore-T'gallant Sail.
4	7					
5	7					Pumps well attended.
6	7					
7	7					Lat. by Ob. 28. 18.
8	7					Log. 69. 35.
9	7					182 days out.
10	7					
11	8		"	"		
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of March 1870
1	7		S by E	S.S.W.		
2	7					This day commences with an
3	7					increasing breeze from S. Eastward
4	6			S.W.		and hazy.
5	6					
6	5					At 6 P.M. Took gale from
7	4					W.S.W. took in Main T'gallsail
8	4					and reefed the Foresail.
9	3		S.E.	W.S.W.		
10	3					At Midnight more moderate.
11	3					Turned out reefs and set the
12	3					Main-T'gal Sail.
1	4		S by E			
2	4					At 4 set everything but the Royals.
3	4					
4	4					The day ends with the wind moderate
5	4		South			from S.W and pleasant.
6	4					Made all Sail.
7	4		S.S.E	S.W.		
8	4					Lat. by Ob. 29. 46.
9	4					
10	4					
11	4		"	"		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 15th day of March 1870
1	4		S by E	S. Eastly		
2	4					First part of this day moderate
3	4					from S. Eastward
4	4					At 2 P.M. Spoke the
5	3					English brig "Eulida" from
6	3					Picton for Cazadero.
7	3					
8	3					At 11 A.M. Bird skipped
9	2	1				to South. Tacked Ship.
10	2	1				
11	2	1				
12	2	1	N by E	Southerly		Latter part of the day light
1	2	1				airs from South to E.S.E and
2	2	1				pleasant weather.
3	2	1				
4	2	1				All sail set.
5	2	1				
6	2	1				Lat. by Ob. 30. 21.
7	2	1	W.S.W.			
8	2	1				
9	2	1		S.E.		
10	2	1				
11	2	1				
12	2	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 16th day of March 1870
1	2	1	N.E. by N.	East		
2	2	1				Commences with light Easterly
3	2	1				airs and cloudy.
4	2	1				Bent sail during Forenoon
5	2	3				towards night.
6	2	3				
7	2	3				
8	2	4				At Midnight wind suddenly
9	2	4	NE by N			increased to a gale from NNE.
10	2	4		S.E.		weather looking bad and barometer
11	2	5				falling rapidly. Furled everything
12	2	6				but the Lower Topsails.
1	6	6		S.S.E.		At 4 A.M. more moderate
2	6	6				Made sail as required and at
3	6	6				10 Set Top gallant Sails.
4	6	6		South		At noon wind shifted to East
5	6	6				in a heavy Squall with torrents of
6	6	6				rain, thunder & lightning.
7	6	6				Furled everything again but the
8	6	6				Lower Topsails.
9	6	6				Pumps well attended.
10	6	6				No. 0.E.
11	6	6	"	"		Lat. by D.R. 31. 20.
12	6	6				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 17th day of March 1870
1	2		North	N.E. by N.		This day Commences with a gale
2	2					from N.E. by N. and heavy Squalls.
3	2					Ship under Lower Topsails and
4	2					reefed Spanker.
5	2					More moderate during
6	2					the night. Ship laboring very
7	2		NNE by N	East		heavy and shipping much water.
8	2					Set the reefed upper Topsails
9	2					to steady by and at 8 A.M.
10	2					gale increasing took them again.
11	2					
12	2					Stout N.E. by N. squall
1	2					passed across the Stern, about
2	2					half a mile distant.
3	2					
4	2					At noon blowing a severe gale
5	2					from East and weather looking
6	2					very bad.
7	2					Pumps well attended.
8	2					
9	2					
10	2					Lat. by D.R. 32. 00.
11	2		"	"		
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 18th day of March 1870
1						This day commences with heavy
2						gales from East. At 10 P.M.
3						Kept off to near ship. Took in
4						the Fore Topsail and Starboard
5						clue of the Main-Topsail.
6						By this time the wind had
7						increased to a tremendous gale
8						and a very high sea running.
9			SE			Judged it best to keep her Head
10	150 miles					to it, not being safe to bring her
11			S.	W.N.W.		to the wind.
12						Gale still increasing at times being
1			S			a hurricane. At 7 P.M. Hailed
2						a fearful Squall, accompanied
3						with very heavy thunder & lightning
4						and hail. Still keeping her before
5						the wind and sea. Wind N.N.E. N.
6						Sea frequently boarding her and
7						filling the decks full even with
8						the sail.
9	2		SW by W	West N	5 pts.	After Midnight the Squalls less
10	2		to			violent and of shorter duration.
11	2		SW by W			At 8 A.M. Having moderated
12	2					some, and sea gone down a little

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1						Hove to on the Starboard Tack.
2						At the Lower Main-Topsail whole, and
3						the reefed Spanker.
4						Remainder of the day Still blowing a
5						heavy gale from N.N.E. and high Sea
6						running. Ship laboring and rolling
7						very heavy and shipping much water.
8						
9						Pumps constantly attended.
10						At noon got an Indifferent Observation
11						which made the Lat. 31. 37.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 19th day of March 1870
1	2		SW/W	N.N.W.		Stiff Contrimes deay westerly gales and light rain.
2	2					At 8 P.M. a Norwegian bark passed close to us steering before the wind.
3	2					At 8 P.M. Sale increasing again. Took in reefs close of Main Topsail and Fore Topmast Stay-sail.
4	2		to			deay deay Squalls from S.W during the night.
5	2					Sick Calming and straining very deary.
6	2					At Sunrise moderated a little.
7	2					At 8 A.M. Set the Main Top Sail and reefed Foresail.
8	2					The day ends with strong gales from S.W and deay sea.
9	3		W.S.W.		3 pts.	Pumps strictly attended.
10	3					Lat. f d 31.00.
11	3		—"—	—"—		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 20th day of March 1870
1	2	1	W.S.W.	N.W.	3 pts	First part of this day strong N.W gales and deay sea.
2	2	1				
3	2	1				
4	2	1				At Sunset, moderate and sea going down.
5	2	1				At 10 P.M. Set the reefed upper T'sails.
6	2	1				
7	2	1				Middle hours: Moderate: Made sail as required and at 8 A.M. Set everything.
8	2	1				
9	2	1				
10	3					
11	3					The day ends with Light Northerly airs and cloudy.
12	3		—"—	—"—	——	
1	3					Pumps well attended.
2	3					
3	3					
4	3					
5	3					
6	3					Lat. f d 30.05.
7	3		West	N.N.W		Long. 70.20.
8	3					
9	2					139 days out.
10	2		W.N.W.	North.		
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 21st day of March 1870
1			Calm			
2						First part of this day calm and cloudy.
3						
4						
5						
6						At 11 P.M. Set a light air from S.W.
7						
8						
9						
10						
11	2		NW/W	S.W.		The day ends with Light breezes from S.W Westward and pleasant weather.
12	2					
1	3					
2	3					
3	3					Boy in sight standing to the Southward.
4	3					
5	3					
6	3					All sail set.
7	3					
8	3					Lat. f d 31.05.
9	3					
10	3					
11	3		—"—	—"—		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 22d day of March 1870
1	4		NW/W	S.W.		
2	4					This day commences with moderate breezes from S.W & cloudy.
3	4					
4	4					Middle hours: Fresh & squally. Took in Light Sails & flying Jib.
5	5					
6	6					
7	6					At 8 A.M. Bent the Main-sail and Sail. Heavy head sea on.
8	6					
9	6					At daylight more moderate. Not so much sea.
10	6					
11	6					At 10 A.M. Main-sail Sail, flying Jib, Main Royal & Jeff Sail.
12	6		—"—	—"—		
1	5					
2	5					Latter part squally from N.W. Very heavy head sea on. Furled the light Sails again.
3	5					
4	5					
5	5					Pumps carefully attended.
6	5					
7	5					
8	5					Lat. f d 32.38.
9	5	1				
10	5	1	N.W	W.S.W		
11	6	1				
12	6	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 23d day of March 1870
1	5		S.W. by S.	E.S.E.		This day commences with fresh breezes from W.S.W. and clear.
2	5					At 7 P.M. Shook Reefs in the S.W. Boat keeps
3	5					Took in the Top gallant-sail and
4	5					reefed the Heads'ls & Courses.
5	6					First part of the night cloudy,
6	6					at times blowing a gale, at others
7	6					quite moderate.
8	6					At 1 A.M. Wind Sudden
9	6					shifted to S.S.E. in a gust.
10	4					Braced round the yards.
11	4		S.S.W.	West		Rest of the night, moderate.
12	4					At 4 A.M. Set all sail, and
1	3					at Main Top-gallant sail, and
2	2		S.W.	S.S.E.		at 7 set everything.
3	2					The day ends moderate
4	2					from S.S.E. & cloudy.
5	3					
6	3					Pumps well attended.
7	3					Lat. by D.R. 38.30.
8	3					
9	3					
10	3					
11	3		— " —	— " —		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 24th day of March 1870
1	5		S.S.W.	South		This day comes in with N. mid part
2	5					from South & cloudy weather.
3	5					Furled Royals & Top'sls.
4	5					First part of the night Stormy heavy
5	5					squally. Took in Top-gallant sails
6	5					and at Midnight reefed & hauled
7	5					and Fore Topsail.
8	5					At 4 A.M. Boat adrift.
9	5					At 6 A.M. Wind increased to a
10	5					gale. Furled the after Upper
11	5					Jib and Mainsail and reefed the
12	5		— " —	— " —		Foresail.
1	4				2 pts.	At noon Moderate & fair.
2	3					and furled the Foresail, blowing
3	3					a hard gale from S.S.E. & a
4	3					clear weather.
5	3		East	S.S.E.		Heavy Sea on. Up fisherjibs and J.
6	3					
7	3					Gun two reefs Stormy to S.S.E.
8	3					
9	2				4 pts.	Pumps carefully attended.
10	2					
11	2		— " —	— " —		Lat. by D.R. 34.29.
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Callao towards Hampton Roads.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 25th day of March 1870
1	2		S.W.		3 pts	Fresh gales from W.S.W. and clear
2	2					At 4 P.M. Moderating. Got sheeted
3	2					Courses and set on topsails, Jib and
4	2					main-t'gmast stay-sail.
5	3				2 pts.	At 8 tacked ship and stood
6	3					and tacked to the Eastward.
7	3					At 10 P.M. Got Top-gallant sails G.
8	3				—	
9	3		East			Middle hours: Moderate & clear,
10	3					At Midnight tacked to the S.W.
11	3					and at 4 A.M. made all sail.
12	3					
1	4		S.W.			Latter part of the day moderate
2	4					and fine. Sounded on Soundings.
3	4					Found water in company.
4	4					
5	6					Capt. J.W.W.S.
6	6					
7	6					
8	6					
9	5					
10	5					
11	5		— " —			
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 26th day of March 1870
1	4		N.W. by N.	N. & Var.		First part of this day light N. Easterly
2	4					wind & pleasant. Set Chains and let
3	4					anchors fly the Shoe.
4	3					At 2 P.M. Saw the Land at fifteen
5	3		N.N.W.			miles distant. At Midnight and
6	3					hauling Easterly and freshening.
7	3		North	E. by E.		At daylight Land in sight about
8	3					seven miles off. At 7 A.M. made Cape
9	3					Henry bearing N.W. distant 5 miles.
10	3					At 9 A.M. took a pilot on board.
11	4					At noon passed buoy from East & came to
12	5					At 2 P.M. Cape to anchor in
1	5		N.N.W.			Hampton Roads in 10 fathoms of
2	5					water, paid out 45 fathoms of chain
3	5			East		on the Starboard anchor and furled
4	5					the sails. Capt. went ashore and got
5	6					orders for Baltimore.
6	6					At 8 P.M. Got anchor watch, two men and an
7	6					Officer in a watch. — At Midnight
8	6					blowing a gale from East. Thick & rainy.
9						This day contains the remarks for
10						thirty six hours and commences civil time.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Hampton Roads towards Baltimore

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Sunday	March 27th 1870		Stg. East & pld a rain.
2						Moderating towds morning
3						and hauling to the Southward.
4						At noon took a Baltimore pilot
5						on board, got under weigh and
6						proceeded towds Baltimore.
7						Wind S.W. At 4 P.M. passed
8						New point Comfort light house
9						pass. N.E.S.W. At 11 passed
10						Windmill point. At Midnight
11						wind fresh from West.
12						
1			Monday 28th			Fresh Leg from West. Passed
2						the mouth of Patuxent river. At
3						8 A.M. Wind inclined to a gale by
4						the afternoon. Blowing a fine gale
5						& Lofty Under Reefs. At 6 P.M. came
6						to Anchor in "five fathom Bank"
7						Let go Port anchor & gave her 45
8						fathoms of chain. Furled sails and
9						set anchor watch. Blowing a
10						gale from N.N.E.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
1			Tuesday 29th			Stg. East wind moderating towds
2						Noon. At Sundown Calm.
3						Unbent the Sails. Stopped up the
4						awning &c. &c. and got everything
5						ready for going to the wharf.
6						
7			Wednesday 30th			Moderate Southerly Wind. At 8 A.M.
8						commenced to heave up the anchor
9						tow boat "Emma" took us in tow
10						and proceeded towards the City.
11						At 10 A.M. got up to Town &
12						provided that two or three
1						ships lay the pass the wharf.
2						Cook & Sailors left the vessel.
3						
4			Thursday 31st			Easterly Wind and Cold. Discharged
5						about 130 Tons of guano when the Ship
6						Hauled. Tug boat came alongside
7						and took us in to the wharf. Made
8						fast with Lines & Mooring Chains.
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Laying in towards Baltimore

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Friday	April 1st		Wind Easterly and raining hard
2						all day. Discharging to day.
3						
4			Saturday	2nd		Wind N.E. and cold. Working
5						all day discharging. Send boat
6						left.
7						
8			Sunday	3d		Wind Easterly. Cold & rainy.
9						
10			Monday	4th		Wind Easterly and cold. Worked
11						all day discharging Cargo
12						
1			Tuesday	5th		Same as yesterday.
2						
3			Wednesday	6th		Wind S.E. and pleasant.
4						Worked 1/2 day discharging.
5						Took in the boats and hauled for the
6						Wharf and made fast.
7						
8			Thursday	7th		Wind Westerly. Warm & pleasant.
9						Worked all day discharging. Commenced
10						taking in Ballast.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Friday	8th		Westerly wind & pleasant. Finished
2						discharging. Turned out 1150 tons.
3						Finished Ballast (150 tons).
4						
5			Saturday	9th		Wind to the Southward. Warm and
6						pleasant. Employed cleaning ship
7						Hired two men.
8						
9			Sunday	10th		Strong a gale from the Eastward
10						all day and cold.
11						
12			Monday	11th		Pleasant weather.
1						Employed cleaning ship &c.
2						
3			Tuesday	12th		Southerly wind and fine.
4						Carpenter and one man painting.
5						
6			Wednesday	13th		Moderate and fine. At 4 P.M.
7						took in the boats, Long boat came and
8						took us to Lowest point under the
9						Coal-shoot & load coals for
10						Portland, Maine.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Hoping in towards Baltimore

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Thursday April 14th			Light Southerly wind & pleasant. Took in about 310 tons of Coal.
2						
3						
4			Friday 15th			Pleasant weather. Took in about fifty tons.
5						
6						
7			Saturday 16th			Strong N.E. wind and cold. Took in about 220 tons of Coal.
8						
9						
10			Sunday 17th			Blowing a gale from N.E. and raining hard all day.
11						
12						
1			Monday 18th			Wind East & raining. Took in about 220 Tons Coal
2						
3						
4			Tuesday 19th			Southerly wind & pleasant. Took in about 330 tons. Carpenter & Stewardess left the Ship. Cleaned Boats came aboard.
5						
6						
7						
8						
9			Wednesday 20th			Finished loading. At 11 A.M. tow-boat came alongside and took us into the stream. Cook came aboard.
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
1			Thursday 21st			At 10 A.M. Crew came aboard tow-boat "Mary Shaw" took us in tow and proceeded down river. Set the Sails, Up-gallant sails Jib & Spanker.
2						
3						
4						
5						
6						
7						At 3 P.M. Came to an anchor
8						off Swan point
9						At 4 gave her 25 fathoms of
10						Chain and let anchor watch.
11			Friday 22d			
12						At 4 A.M. Set underweight
1						but the wind died out nearly
2						as soon as the anchor was
3						let it go again. At 6 A.M.
4						Cleared up the sails light air
5						from the Southward.
6			Saturday 23d			
7						At 4 A.M. Set underweight. Light
8						& died out Calm. Anchored at Annapolis
9						At 4 P.M. Hove up the anchor with
10						a light breeze from the North.
11						About 11 passed the Patuxent
12						River.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Baltimore towards Portland

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Sunday April 24th			Light Southerly wind.
2						At 2 A.M. passed Point Lookout.
3						At 6 A.M. passed Windmill point.
4						At noon it fell Calm and at
5						4 P.M. a light breeze from the
6						Southward. Closed up the sails
7						and let go the anchor off Bens
8						point Comfort.
9						At 7 P.M. furled the sails and
10						set anchor watch.
11						At Midnight passed Cape Henry
12						to Southward.
1						
2			Monday 25th			At 6 A.M. Hove short. Wind light
3						from South. At 7 wind Canting to
4						the Westward got under weigh
5						and made all sail.
6						At noon about of York Spit
7						light-boat. Bid boy light pass Port.
8						This day contains the Remarks
9						for twelve hours only in order
10						to commence Sea Time.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 26th day of April 1870
1						
2						At 1 P.M. Wind hauled to North
3						and increasing to a fresh gale
4	4	1	SE½E	SE½E		At 3 P.M. Discharged the Pilot
5	4	1				Cape Henry bearing S.W.½W. distant
6	4					two miles. Wind & Sprit from N.E.
7	3					Furled light sails & got
8	3					down Fore Up-gallant sail.
9	3					Pumped the Ship. Secured the
10	2					anchors & Chains &c &c.
11	2					First part of the night
12	1					moderate. At Midnight Calm.
1			Calm			
2						Remainder of the day light baffling
3						airs and Calms.
4						
5						
6						
7						Lat. / Ob. 36. 50.
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Baltimore towards Portland.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 27th day of April 1870
1			Calm			This day begins Calm & clear.
2						
3						
4	1		N.E	E.S.E.		N.B.B. light air from E.S.E.
5	2					All hands employed
6	2					shovelling coal.
7	3					
8	3			South		Middle hours. Light
9	3					breze from South to S.B.
10	4					
11	4					
12	4		—"—	S.S.B.		Latter part of the day moderate
1	4					steady breze from S.S.E and
2	4					hazy.
3	4					
4	4					All drawing sail at.
5	4					
6	4					
7	4	1				Lat. f/ B. 37. 28.
8	4	1				
9	4	1				
10	4	1				
11	4	1	—"—	—"—		
12	4	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 28th day of April 1870
1	6		N.E.	S.B.		First part of this day fine, steady
2	6					breze from S.B and pleasant.
3	6					
4	6					
5	6					Middle hours: Ruckle Cont.
6	6					
7	6					
8	6					Latter part of the day wind a
9	6					little freshen.
10	6	1				At 8 A.M. It set in thick fog
11	6	1				but cleared up just before
12	6	1	—"—	—"—		noon so as to get an indifferent
1	6	1				observation.
2	6	1				
3	6	1				All drawing sail at Throughout.
4	6	1				
5	6	1				Pumps Attended.
6	6	1				
7	6	1				Lat. f/ B. 39. 26.
8	6	1				
9	6	1				
10	6	1				
11	6	1	—"—	—"—		
12	6	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Baltimore towards Portland.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 29th day of April 1870
1	6		N.E.	S.B.		
2	6					This day commences with fresh
3	6					breze from S.B and thick weather.
4	6					
5	6	1				Middle hours: Moderate and
6	6	1				baffling from S.B to W.B.
7	6	1				
8	6	1				
9	5					
10	5			S.W		
11	5					Latter part of the day light
12	5		—"—	W		Northerly airs and raing.
1	4					
2	4					
3	3					Great seas in sight.
4	3					
5	1	1				So. Co.
6	1	1		N.W		Lat. f/ B. 40. 40.
7	1	1				
8	1	1	E.N.E	North		
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 30th day of April 1870
1			Calm			
2						First part of this day, Calm & raing.
3						
4						At 6 P.M. It set a light air from
5						the Eastward.
6						At Midnight got sounding
7	3		N.N.E. East			this 7 fathoms, mud and sand.
8	3					Remainder of the night
9	2					Calm and Thick.
10	2					
11	1					Latter part of the day light
12	1					air from N.E and pleasant
1			Calm			weather.
2						
3						
4						
5						
6						
7						
8						Lat. f/ B. 40. 42.
9	1	1	E.S.E.	N.E		
10	1	1				
11	1	1				
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Baltimore towards Portland

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 1st day of May 1870
1			Calm.			First part of this day calm and clear.
2						
3						
4						
5						
6						Middle hours: Light breeze from N. W. to West.
7						
8						
9	1	1	E. by S.	N. W.		
10	1	1				At 7 P.M. Rhode Island Shoal light-ship bearing East dist 10 miles.
11	1	1				
12	1	1				
1	2	1		West		At 9 passed bn. clear E. spoke bn. sld mail on board.
2	2	1				
3	3	1				
4	3	1				Latter part of the day moderate breeze from N. W. & pleasant.
5	4	1				Sld drawing to the East.
6	4	1				
7	4	1		N. W. by W.		
8	4	1	E. by S.			Lat. by Ob. 41.00.
9	5					
10	5		E. by N. E.			
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 2nd day of May 1870
1	5		E. by N. E.	N. W.		First part of this day moderate breeze from N. E. to East and pleasant.
2	5					
3	4	1		West		Middle hours: Fresh from N. N. W. and clear.
4	4	1				
5	4	1	N. E.	N. N. W.		At 6 A.M. tacked & the ship stood.
6	4	1				
7	5		N. E. by N.			
8	5					
9	5					
10	5					
11	5					
12	5					
1	5		N. N. E.	N. W.		The day ends with the wind moderate from N. N. W. and pleasant weather.
2	5					
3	5					Sld sail at.
4	5					
5	5					Pumps Attended.
6	5		N. E. by N.			
7	4					Lat. by Ob. 41.55.
8	4					
9	4		West	N. N. W.		
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Baltimore towards Portland.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3rd day of May 1870
1	5		West	N. N. W.		This day commences with the wind very light from N. W.
2	2					
3	2					
4	1		N. N. W.	West		At 3 P.M. Sta Light in sight from West.
5	3					
6	3					
7	4		N. by W.	W. S. W.		
8	4					
9	5	1				Middle hours: Moderate from W. S. W.
10	5	1				
11	5	1				
12	5	1				
1	5	1				At daylight Land in sight.
2	5	1				At 9 A.M. passed Cape Elizabeth. Ran into Portland Harbor and at
3	5	1				10 A.M. Came to anchor off
4	6		— .—			Custom-house Wharf.
5	6			S. W.		Furled the sails and cleared
6	6					up the decks. Wind light from
7	6					South.
8	6					
9	4			South		
10	4					Crew left the Ship.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1						At 8 P.M. Ship "Yankee Girl" of Cumberland while tacking ran into our Starboard quarter badly chafing the mizzen rigging,
2						
3						
4						
5						breaking three of the Stanchions
6						in the sails besides doing other
7						damage. Sld at Sundown with
8						
9						for the Southward.
10						This day contains the remarks for
11						thirty-six hours and ends Log.
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from _____ towards _____

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.	day of	18
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.	day of	18
1			Tuesday June 28th	1870.		Fine weather & d.t. Taking in ballast.		
2						Mate came aboard.		
3								
4			Wednesday 29th			Light breezes & d.t.		
5						Finished taking in ballast, 2nd Mate and Cook came aboard		
6								
7								
8								
9			Thursday 30th			Light Breezes & fine. Crew came aboard, and at 10 A.M. Cast off from the wharf and towed into the stream and anchored		
10								
11						This day contains 12 hours and ends as it began		
12								
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Portland towards Philadelphia

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.	1st day of	July	18	70
1				N.W.						
2						At 2 P.M. St. London ranging Lighthouse N.E. by E. 1/2 E.				
3										
4				North						
5										
6						Made all sail with the wind light from the N.W.				
7	4		S.E. by S.	East						
8	5					At 4 passed Cape Elizabeth bore N.E. hauling to the Northward.				
9	6		S.S.E.							
10	6									
11	6									
12	6					First part of the night moderate breeze from the Eastward & cloudy.				
1	6					At Midnight Ditto				
2	6									
3	6									
4	5					Latter part of the day fresh breeze from E.N.E. and Thick weather				
5	5					Set Sail Set				
6	5					Do. Do.				
7	6					Set J.C.R. 4.55.				
8	6			E.N.E.						
9	7									
10	7		South							
11	7									
12	7		— —	— —	"					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.	2d day of	July	18	70
1	6		S.W.	S.S.E.						
2	6					First part of this day and middle hours fresh breeze from S.S.E. to S.E. and from Light to moderate breeze.				
3	6									
4	6									
5	6									
6	6		S.W.							
7	6									
8	2			South		Light General vessels during the night bound to the Southward.				
9	2									
10	2	1								
11	2	1				Latter part of the day fine steady breeze from S.E. d.t. hazy				
12	2	1								
1	2	1				Set Sail Set throughout.				
2	2	1								
3	3									
4	3									
5	3			E.S.E.						
6	3	1								
7	3	1								
8	5									
9	6		S.W.							
10	6									
11	6									
12	6									

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Portland towards Philadelphia

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4		W by S & W ESE			3d day of July 1870
2	4					
3	4					First part of this day fine steady breze from E. by S. E. and clear.
4	4					
5	5					
6	5					
7	5		W by S & S			Middle hours: Thick, and rainy
8	5					
9	6					
10	6					
11	6	1				Latter part of the day light baffling airs from South & E. S. E and Thick fog.
12	6	1				
1	6	1				Sel'd sawing & Set throughout.
2	6	1				
3	6					So. Obs.
4	6					Lat of O. R 39. 19.
5	4					
6	4					
7	3			Variable		
8	3					
9	2					
10	1					
11	1		— " —	— " —		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	3		W by S & S	S E		4th day of July 1870
2	3					
3	3					This day begins with light S. E. steady breze and thick cloudy Sky throughout night.
4	4					
5	5					
6	6		W by S			
7	6					Middle hours first from South and cloudy.
8	7					
9	7					
10	7			South		Latter part moderate from S. Eastward & cloudy.
11	7					
12	5					Sel'd Sail'd St. Lawrence & Lucas in company.
1	6					
2	6					Put anchors in the hawse.
3	6					
4	5					So. Obs.
5	5					Lat. by O. R. 39. 40
6	4					
7	4		W by S			
8	4	1				
9	4	1		S. E.		
10	4	1				
11	4	1				
12	4	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Portland towards Philadelphia

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		West	E S E		5th day of July 1870
2	3					
3	3					This day begins with light wind from E. S. E and hazy.
4	3					At 4 P. M. made land South of Cape Henlopen
5	3		S W			about five miles off. Hauled up N. W.
6	3					At 6 P. M. took a Pilot aboard.
7	3					First part of the night very light from the Eastward Lying but
8	3					entirely about Midnight.
9						At 2 A. M. Cleared up the Sails
10						and let go the anchor, Cape
11						Henlopen bearing S by W. distant 3 miles.
12						At 6 A. M. Set under weigh with the wind
1						light from the Southward. Calm most
2						of the forenoon. At noon light air from South.
3						At 1 P. M. passed Cape Henlopen Light-House.
4						Remainder of the day light baffling breze.
5						At 11 P. M. Anchored off Chester. Off
6						anchor waters. This day, Contains 36
7						hours and Commences Mean Time.
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1			Wednesday July 6th			day of 18
2						At 4 A. M. got under weigh with a light air from South
3						At 10 took a tow-boat abreast
4						of the quarantine.
5						And at noon anchored off the
6						Navy Yard.
7						At 2 P. M. tug boat Cambridge
8						and took us into the ballast
9						wharf at Camden point.
10						Cook & Tailors left the Ship.
11						
12			Thursday 7th			Stormy Southerly wind. Discharged
1						about 100 tons of
2						ballast and took in Sixteen
3						Cords of dunnage wood.
4						
5			Friday 8th			Stormy Southerly wind. Stormy
6						in the morning. Took in twelve
7						Cords of dunnage wood.
8						Stevedores at work trimming
9						ballast and getting ready
10						for Cargo. At noon all
11						ready for oil.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal ~~from~~ Laying in ~~towards~~ Philadelphia

day of 18 71

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1			Saturday July 9th			Warm and pleasant. Steered
2						my trimming ballast &c.
3						Loosed sails to dry and oiled
4						the roof deck.
5						Cook Came aboard.
6						
7			Sunday 10th			Stiff Southerly wind and fine.
8						
9			Monday 11th			Light Southerly wind and
10						Dry Rot. Unbent the Spanker
11						and Up-gallant sail & main Royal.
12						
1			Tuesday 12th			Light Southerly wind & Rot
2						A.S.E.B. Had a very heavy
3						squall from N.W. with Hail
4						& rain.
5						
6						
7			Wednesday 13th			Light breze from South & pleasant.
8						Loosed & bent sails to dry.
9						Fished 2 men at night &
10						put them
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1			Thursday 14th			Light Southerly wind & Rot
2						took in a ton of Coal.
3						
4						
5			Friday 15th			Strong wind from South & pleasant.
6						Oiled the main deck.
7						
8						
9			Saturday 16th			Wind West and Rot weather.
10						Unbent Main- Up-gallant Staysail
11						and altered it
12						to Cargo yet.
1						
2						
3			Sunday 17th			Very Rot all day. Had a
4						heavy Squall from S.W. towards
5						night.
6						
7			Monday 18th			Wind Northerly and Rot.
8						Relieving flying jibs.
9						
10			Tuesday 19th			Pleasant weather. Strong
11						Winds night. To Cargo yet.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal ~~from~~ Laying in ~~towards~~ Philadelphia

day of 18

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1			Wednesday July 30th			Cloudy & cool in the forenoon
2						Clear & Rot rest of the day.
3						
4						
5			Thursday 31st			Pleasant weather. Loosed
6						sails to dry. Coking in stoves.
7						
8						
9			Friday 32d			Fine weather. Rot & Dot.
10						Cook in more stoves and stowed
11						them.
12						
1						
2			Saturday 38d			Very fresh & mid & pleasant.
3						To Cargo yet.
4						
5						
6			Sunday 24th			Fresh breze from S.E. & fine.
7						
8						
9			Monday 25th			Wind fresh from S.E. & pleasant
10						weather. Hauled ~~ahead~~ about
11						twenty feet.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1			Thursday 26th			Resting & winds and Rot.
2						
3						
4			Wednesday 27th			Calm & Rot all day. Wind
5						Easterly & cloudy at night.
6						Dry days all to-day
7						
8			Thursday 28th			Light S.W. wind and
9						dry Rain. Relaxing Sail &c.
10						To Cargo yet.
11						
12						
1			Friday 29th			Wind West and pleasant.
2						Relaxed the old Jib.
3						
4						
5			Saturday 30th			Wind S.W. and fine weather
6						To Cargo yet.
7						
8						
9			Sunday 31st			Southerly wind & pleasant.
10						Coolest day for two weeks.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal ~~from~~ Laying in ~~port~~ Philadelphia

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Monday August 1st	Westerly Wind and pleasant. Ll Juntd		
2						
3						
4			Tuesday 2d "	Came as yesterday.		
5						
6						
7			Wednesday 3d "	Calm & hot. Painted Water-casks & tanks. No Cargo yet.		
8						
9						
10						
11						
12						
1			Thursday 4th "	Westerly Wind & hot. Put out mooring chains and took in Hawsers. Showery at night.		
2						
3						
4						
5						
6						
7			Friday 5th "	Wind S.W. and pleasant.		
8						
9			Saturday 6th "	Calm & hot. Scraped some of the sails to-day. Finished them at night		
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Sunday 7th "	Pleasant Weather. Very hazy.		
2						
3						
4			Monday 8th "	Hot and close. No Cargo yet.		
5						
6						
7						
8			Tuesday 9th "	Same as yesterday.		
9						
10						
11						
12			Wednesday 10th "	Close and hot. Very heavy thunder showers during the night		
1						
2						
3						
4			Thursday 11th "	Heavy showers, thunder and lightning all day. Moved to Greenwich Point and began loading. Took in 150 Bbl of Oil.		
5						
6						
7						
8						
9			Friday 12th "	Pleasant weather. Took in 450 Bbl of Oil.		
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal ~~from~~ Laying in towards Philadelphia.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Saturday August 13th	Wind Westerly & pleasant. Took in 750 Bbls of Petroleum Loosed the sails to dry.		
2						
3						
4						
5						
6			Sunday 14th "	Wind S E a Gale all day.		
7						
8						
9			Monday 15th "	Wind Westerly & fine. Took in 150 Bbls. Knocked off at 9 A M for want of Oil. In the afternoon took in casks and had four men aboard to move the vessel but no boat came. Rode her fast again.		
10						
11						
12						
1						
2						
3						
4						
5						
6			Tuesday 16th "	No Cargo to-day. At 8 P.M. tug-boat came and took us to the next wharf below.		
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Wednesday 17th "	Took in 1000 Bbls of Petroleum.		
2						
3						
4			Thursday 18th "	Took in 856 Bbls of Petroleum. Finished the lower hold Took Water-Casks. Tenders &c. on deck. Cabin Boy came aboard.		
5						
6						
7						
8						
9						
10			Friday 19th "	Took in 164 Bbls of Petroleum Set Fore-& Main-gallant sails & Main Royal.		
11						
12						
1						
2						
3			Saturday 20th "	A.M. wind and pleasant. No Cargo to-day.		
4						
5						
6						
7						
8			Sunday 21st "	Strong Northerly wind and Quite cool to-day.		
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Laying in towards Philadelphia.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Monday	August 22d		Southerly wind & pleasant weather.
2						Took in 500 Bbls of Petroleum.
3						Rec'd off at 4 P.M. for want
4						of oil.
5						
6						
7			Tuesday	23d		Light Southerly airs and Calm.
8						Received 500 Bbls of Oil
9						did'nt take it all in. Capt not
10						getting troops with it.
11						
12						
1			Wednesday	24th		Took in 500 Bbls of Petroleum
2						and finished taking in the lot
3						we received yesterday.
4						
5						
6			Thursday	25th		Light Southerly wind and Calm.
7						Took in 174 Bbls of Petroleum.
8						At 11 A.M. finished taking
9						in 5174 Bbls. This day
10						17 P. forward. 18.2 Aft.
11						Thos Cain Cyclist visit.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
1			Friday	26th		Stiff Southerly wind & cool.
2						Hauled Main tack aboard.
3						Steering for Cape. At 10 A.M. tried
4						to haul across the dock but wind
5						and tide were too strong and had
6						to make fast again.
7						
8			Saturday	27th		Moderate & pleasant. At 6 P.M.
9						tow-boat came and took us into
10						the Stream and anchored us.
11						At 8 P.M. Capt came aboard
12						tow-boat & pilot came.
1						Hove up anchor and started
2						down river. At 10 P.M. Came
3						to at Marcus Hook.
4						Bird light from the Eastward.
5						
6			Sunday	28th		At 8 A.M. Set main reefs and
7						at 9 hoisted Jib. Towboat Comdt
8						tow us against the tide.
9						Past Pilot and Chester.
10						At 2 Hove up & proceeded down
11						At 6 P.M. anchored off Bonby Flat
12						Light V. Eastward.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Monday	August 29th		At 4 A.M. Set under main sail with
2						light breeze but the wind dying
3						on the 30th had to anchor.
4						At 1 P.M. Set under sails with
5						moderate S.E. breeze.
6						At 7 P.M. anchored at Cross Ledge
7						light-ship.
8						Crowd a sail during the night.
9						
10			Tuesday	30th		At 5 A.M. Set under main sail
11						with a fresh breeze from N.W.
12						At 8 passed Brandywine light
1						At 10½ A.M. discharged the pilot.
2						At noon Cape Henlopen bore
3						West distt 9 miles.
4						Bird and light from N.W.
5						This day contains the same
6						for 24 hours ending and commences
7						sea time.
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 31st day of August 1870
1	4		E by N	N.W.		This day commences with moderate
2	4					breeze from N.W. & pleasant weather.
3	4					
4	4					All hands employed
5	4					putting on chafing gear, stowing
6	4		East			away lines and cleaning everything.
7	4					
8	4					At 6 A.M. Cape Henlopen
9	3					light bore N.W. by W. distt 13 miles.
10	3					
11	3					Latter part of the day light
12	3					baffling airs & calms.
1	3					
2	3			Baffling		All sail set throughout.
3	3					
4	3					At noon Calm and cloudy.
5	2					
6	2					Dy Jobs
7	2					Lat. by D.R. 38.55.
8	2					
9			Calm			
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 1st day of September 18 70
1			Calm			First part of this day calm and cloudy.
2						
3						Took in the anchors and unbent the chains.
4						
5						Middle hours: Came to a hawse.
6						At 8 A.M. Shook of N. York Pilot-boat in a canoe.
7						
8						Latter part of the day light airs from S.E and pleasant.
9						
10						Pumps attended.
11						
12						
1						
2			Calm			Lat. by Obs. 48.08.
3						
4						
5						
6						
7						
8	2		ESE	N.E.		
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 2d day of September 18 70
1	3		SEbS			This day commences with light
2	3					breezes from N.E. Eastward and
3	3					pleasant weather.
4	3					
5	3					All hands employed setting up
6	3					rigging &c.
7	3		SE			
8	3					Middle hours: Came to first.
9	3					
10	3					Latter part of the day fresh
11	3					breezes from N.E and clear.
12	3					
1	3					
2	3		SEbE			Took in some of the light sails.
3	3					Wind also is latter Comb.
4	3					
5	3					Very heavy N. Easting swell
6	3					all through the 24 hours.
7	3					
8	3					
9	3		ESE			
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3d day of September 18 70
1	4		ESE			This day begins with fresh
2	4					N. Easterly wind & hazy. At 4 P.M.
3	4					wind backing to the Westward
4	4					and increasing. Furled T-gallt sls.
5	4					At 6 furled Mainsail & Jib
6	4		ESE			reefed the upper T'sails.
7	4					At Midnight wind South
8	4					and blowing a gale furled upper
9	4		East			T'sails and Foresail.
10	4				3 pts	At 4 A.M. Blowing a
11	3					terrific gale. Took in the
12	3					T'sail and reefed close. Part
1	2	1	ENE	South	4 pts	Main one. Hove to on the Port
2	2	1				tack under the close Main
3	2	1				T'sail and Balance reefed Staks.
4	2	1				Remainder of the day
5	2				6 pts.	very heavy squalls. Thick
6	2					and stormy. Wind Canting
7	2					Westerly at noon.
8	2					Pumps well attended.
9	2					Lat. Obs.
10	2			NNW		Lat. by Obs. 47.16.
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of September 18 70
1	3		ESE	N.W.		This day comes in with moderate
2	3					gale. Wind backing to the Westward.
3	3					At 1 P.M. Got the lower
4	3					T'sails up at 4 Set reefed
5	4					upper T'sails & Foresail.
6	5					At 6 P.M. out all reefs
7	5		ESE			& Jib, mainsail & Main T'sail
8	5			West		gallant sail.
9	5					At Midnight
10	5					wind W.SW and moderate.
11	5					Set all drawing sail.
12	5			WSW		
1	5					Latter part of the day moderate
2	5					breezes from S.W & pleasant.
3	5					All sail set.
4	5					
5	5			SW		Pumps constantly attended.
6	5					pumping up some Petroleum.
7	6					
8	6					Lat. Obs. 47.44.
9	6					Log. 67.17
10	6					
11	6		"	"		
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

5th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	7		E by S	S by W		
2	7					First part of this day moderate
3	7					breezes from S.S.W. & pleasant
4	7					weather.
5	8					
6	8			S.S.W.		Middle hours: fresh gusts
7	8					S.S.W. and squally.
8	8					Took in Light Sails and Royals
9	8					& fore-gallant sail.
10	8					
11	8					At 4 A.M. Bird died on.
12	8					Calm & raining for about four hrs
1	8					
2	8					Latter part of the day light
3	8					S.W. Wind & Cloudy.
4	8					
5	8					Set all drawing sail.
6	8			Baffling		
7	8					
8	8					
9	8			S by W		
10	8					
11	8					
12	8					

Lat. by Ob. 38.40

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

6th day of September 1870

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	3		E by S	S by W		
2	3					This day commences with light
3	3					air from S.W. & cloudy weather.
4	3					
5						At 1 past 4, Wind fresh, Calm
6			Baffling			and squally. Appearances all around.
7						Hoisted Royals & Jeff to Mast.
8						At Midnight Wind
9	4		E by S	S by W		and squally. Took in the Royals
10	4					said and flying jib. Wind South.
11	6					
12	6					At 8 A.M. a little more
1	6					moderate and clear weather.
2	7					Set everything.
3	7			South		
4	6					The day ends with pleasant
5	6					breezes from S.W. and fine weather
6	6					
7	6					Pumps Attended.
8	6					
9	6			S by W		Lat. by Ob. 39-15.
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

7th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		E by S	S.S.W.		
2	6					This day commences with fresh
3	6					breezes from S.S.W. & clear.
4	6					
5	6					First part of the night
6	6					Wind baffling from West to
7	6					South.
8	6					At Midnight got
9	6			South		a fresh breeze from South.
10	6					Furled the Royals.
11	6					
12	6			West		At 6 A.M. Wind dark
1	6			South		Westerly. Set the Royals.
2	6					
3	6					The day ends with fresh
4	6					breezes from S.S.W. and pleasant
5	6					weather.
6	6					All Sail Set.
7	6			S.S.W.		
8	6					Lat. by Ob. 39.36.
9	6	1				
10	6	1		S.W.		
11	6	1				
12	6	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

8th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	8		E by S	S.S.W.		
2	8					First part of this day Strong
3	8					breezes from S.S.W. & Clear.
4	8					At 2 P.M. Took in
5	8					the Royals & Jeff to Mast.
6	8					
7	8					Middle hours: Fresh and
8	8					squally. Wind hauling Southerly.
9	8					
10	8					At daylight more moderate.
11	8			S.S.W.		Set everything.
12	8					
1	8					The day ends with pleasant
2	8					breezes from S.S.E. and pleasant.
3	8					
4	7			South		Bark "Jonathan Chase" in Company.
5	7					
6	7					
7	7					Lat. by Ob. 40.15.
8	7					
9	6		E by S	S.E. by S		
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 9th day of September 1870
1	6		E by S			
2	6					Throughout this day fresh N. Easterly breezes and clear weather.
3	6					
4	6					
5	5					
6	5					
7	5					
8	5					
9	5		E by E			At Sunset Dark "Jonathan Ober" hull down astern.
10	5					
11	5					
12	5					
1	6		SE by E			At 7 A.M. Took in the Royals.
2	6					
3	6					
4	6					Pumps Attended.
5	6					
6	6					
7	6					
8	6					Lat. by D.R. 39.20.
9	6		SE by S			
10	6					
11	6					
12	6					

Moderate Easterly.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 10th day of September 1870
1	5		SSE			
2	5		ESE			
3	5					First part of this day fresh Easterly wind and squally.
4	5					
5	5					
6	5					
7	5					At 8 P.M. Tacked to North.
8	5					
9	5					
10	5					
11	5					Middle hours and latter part of the day moderate and pleasant.
12	5		— " —			
1	4					
2	4					
3	4					
4	4					
5	4					
6	4					
7	4					Lat. by D.R. 41.07.
8	4					
9	4					
10	4					
11	4		— " —			
12	4					

Easterly.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 11th day of September 1870
1	5		SE			
2	5		SSE			This day commences with moderate breezes from the Eastward & pleasant weather.
3	5					
4	5					
5	5		South			At 1 P.M. tacked to SE.
6	5					
7	4					Middle hours Strong Breezes
8	5		SSE.			and squally.
9	5					
10	5					At Sunrise passed heavy
11	5		SE.	ESE.		from SSE and cloudy.
12	5					
1	5					Latter part of the day
2	5					fresh Southerly gales and
3	5					squally. At 11 took in top-gallant
4	5					sails & flying jib. At 8 P.M.
5	5	1	East	SSE		reefed the upper topsails and
6	5	1				mainsail.
7	6					Pumps well attended
8	6	1				to Ob.
9	7	1	ENE, SE			Lat. by D.R. 41.41.
10	7	1				Lat by Ob. 42.24.
11	7	1				
12	7	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	~~Lat. by Ob.~~	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 12th day of September 1870
1	2	1	NE.			
2	2					At 1 P.M. Took in every-
3	2	1	NEbyN		3 pts.	thing but the lower topsails &
4	2	1				Reefed Foresail blowing a
5	2					hard gale from SEbyE. Thick
6	2					and raining.
7	2				6 pts	At 6 P.M. Took in the Foresail
8	2					& Fore-topsail and hove to on the
9	2					Starboard tack under the lee
10	2					close of main-topsail and close
11	1			NW.		reefed Spanker.
12	1					Barometer falling rapidly.
1	2		ESE	East		At 11 P.M. it stood at 28.165.
2	2					About 11 1/2 o'Clock the wind
3	3					died out and sprung up light
4	5		ESE			from N.W. Took in Main Topsail
5	5					& Set Fore close of the Foresail &
6	5					got her before the wind.
7	5					At 1 A.M. Began to heave up from last and at 2 it blew
8	5		EbyN			a terrific gale. Sea rising fast. At 6 A.M. Set the
9	6					Reefed Foresail. At 10 Set the lower topsails.
10	6					Latter part a little more moderate, but still
11	7		— " —	— " —		blowing a hard gale & high Sea running. At noon
12	7					Set Reefed upper topsails. to Ob.
						Pumps well attended. Lat by D.R. 42.50

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

13th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	8		East	Best		This day commences with moderate gales from West & clear weather.
2	8					The sea getting confused & running in all directions as the gale abates.
3	8					Passed a Shipping much water
4	8					St 2 P.M. Took a heavy sea
5	8					aboard, staving in Galley door
6	8					starting Stars, Water-tanks &
7	8					door & the Ages.
8	8					St 5 P.M. Turned the crew out to
9	8					the Main-Tops'l and set the Main
10	8					Top-gallant Sail.
11	8		—"—	—"—		At Midnight Stars Steady
12	8					wind, sea more regular
1	8					At 6 A.M. Set Main Royal
2	8					The day ends with fresh
3	8					steady breezes from West &
4	8					clear weather. All drawing
5	8					Sail set.
6	8					Pumps Attended. a great deal of
7	8					Petroleum coming up.
8	8					Lat. obs. 43.28
9	8					Log. 48.00.
10	8					
11	8		—"—	—"—		
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

14th day of September 1870

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	8		E.S.E	West		Boudoinhum
2	8					Throughout this twenty-four
3	8					hours strong Westerly Winds
4	8					and clear weather.
5	8					
6	7					High Sea running.
7	7					
8	7					All drawing Sail set.
9	7					
10	7		—"—	W.S.W.		Pumps well attended.
11	8					
12	8					Lat. Obs. 44.04.
1	8					Log. 44.00.
2	8					
3	8					
4	8					
5	8					
6	8					
7	8					
8	8					
9	8					
10	8					
11	8		—"—	—"—		
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

15th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	7		E.S.E	S.W.		First part of this day
2	7					strong steady breezes from S.W.
3	7					and clear weather.
4	7					
5	6	/				Middle part: Much the same.
6	6	/				
7	6	/				
8	6	/				
9	6	/				Latter part of the day: Wind
10	6	/				moderate from S.W. & with
11	6	/				occasional light showers.
12	6	/	—"—	—"—		
1	6	/				Passed a big board to
2	6	/				the Eastward.
3	6	/				
4	6	/				All Sail set.
5	6					
6	6					
7	6			S.W.B.W.		Lat. Obs. 44.19
8	6					
9	5					
10	5					
11	5		—"—	—"—		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

16th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		E.S.E	North		
2	4					
3	4					
4	4					
5	5		East	N.N.E		Throughout this day
6	5					light breezes from North
7	5					to N.N.E and pleasant
8	5					weather.
9	5					
10	5					All Sail set.
11	5					
12	5					Pumps Attended.
1	2					
2	2					
3	2					Lat. Obs. 44.31
4	5					
5	5					
6	5					
7	5					
8	4					
9	4					
10	4		—"—	—"—		
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

17th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		E ½ S	N.E.		
2	5					
3	5					
4	5					
5	5					First part of this day light & N. Easterly breys and pleasant weather.
6	5					
7	5	/				
8	5	/				
9	5	/				Latter part: Hauls from N.N.E and cloudy.
10	5	/				
11	5					
12	5		E ½ S	N.N.E		All sail set throughout.
1	5					
2	5					
3	5					All hands employed setting up rigging, tarring down &c.
4	5					
5	5					
6	5					
7	5					
8	5					Lat. by D.R. 40.31.
9	5	/				
10	5	/				
11	5	/	— " —	— " —		
12	5	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

18th day of September 1870

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	6		E ½ S	South		
2	6					
3	6					
4	6					Throughout this day fine steady breys from South to N.N.E a pleasant weather.
5	6			N.N.E.		
6	6					
7	6	/				
8	6	/				
9	6	/		N.E.		All Sail Set.
10	6	/				
11	7		— " —			
12	7					
1	7					Pumps well attended.
2	7					
3	7			N.N.E.		
4	7					
5	7	/				
6	7	/				
7	7	/				Lat. by D.R. 40.06. Dep. 92.81
	7	/				19 days out.
	7	/				
	7	/				
11	7	/	— " —	— " —		
12	7	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

19½ day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		E ½ S	N.N.E.		
2	5					
3	5					
4	5					This day commences with mdt. breys from N.N.E. cloudy.
5	5					
6	5					
7	4			Baffling		Middle hours: Light baffling breys from N. E. 4 N.E.
8	4		E by S			
9	5					
10	5					
11	5					
12	5					The day ends with the mid light airs from South & pleasant.
1	2					
2	2					All Sail Set throughout.
3	2		E ½ S			
4	2			South		
5	3					
6	3					
7	3					
8	3					Lat. by D.R. 40.17.
9	3					
10	3					
11	3		— " —	— " —		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

20th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	2	/	E ½ S	N.N.E.		
2	2	/				First part of this day light airs from N.N.E. and fine weather.
3	2	/				
4	2	/				
5	2	/				
6	2	/				Middle hours: Calm.
7	2	/				
8	2	/				
9			Calm			
10						
11						
12						At 1 A.M. Saw a light air from the Southward which continued through the day.
1						
2						
3						
4	2		E by S	South		All hands employed on rigging &c.
5	2					
6	2	/				
7	2	/				
8	2	/				Lat. by D.R. 40.37.
9	3	/				
10	3	/				
11	3	/				
12	3	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

21st day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4		E by S	Best		
2	4			to		
3	4					This day commences with light
4	4			South		breezes from Best to South
5	4					and fine.
6	4					
7	4					At 8 P.M. Spoke the
8	4					Bark "Keystone" 15 days out
9	4			South		from Boulogne for N. York.
10	4					
11	5					
12	5		— " —	— " —		Latter part of the day light
1	5					Southerly wind and pleasant
2	5					weather.
3	4					
4	4					Sd Sail 8 Knots.
5	4					
6	4					
7	4					Lat. by Obs. 46.52.
8	4					
9	4					
10	4					
11	4		— " —	— " —		
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

22nd day of September 1870

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	5		East	S by E		
2	5					First part of this day light
3	5					Southerly wind & fine.
4	5					
5	6					Middle hours: Increasing
6	6					gales and squally. Furled
7	6					light sails, flying Jib and
8	6					Fore-top-gallant sail.
9	6					
10	7					At 4 A.M. Blowing a strong
11	7					gale from South and clear.
12	7			South		Took in Main-top-gal. sail
1	7		E by S			reefed the Main sail and
2	7					Fore-t'sail. This day ends
3	7					with strong Southerly gales and
4	7					hazy. Exhibited Sea on.
5	6		East			
6	6					Pumps well attended.
7	6					
8	6					Lat. by Obs. 46.46
9	6					
10	6					
11	6		— " —	— " —		
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

23rd day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4	1	East	South		
2	4	1				Commences with increasing
3	4	1				gales from South.
4	4	1				At 4 P.M. Took in every thing
5	2		E by S			but the Lower Topsails.
6	2					At 7 P.M. Took in three Topsails.
7	2					First part of the night
8	2				4 pts	blowing a very violent gale
9	2					from South. Hove to P.M.
10	2					At 11 P.M. mid Watch
11	2					and shifted to N.E. by E. Guard
12	3		E by S & S	N.E. by N.		away and at midnight set
1	4					Fore-t'sail, reefed Mizen sail
2	4					and reefed upon Main T'sail.
3	5					At 4 A.M. Moderate.
4	5					Turned out all hands and set
5	5					T'gallant sails and at 6
6	5					set all drawing sail.
7	5					The day ends with
8	6					fresh breezes from East and
9	6			West		clear weather. Sd Sail 8 Kt.
10	7					
11	7		— " —	— " —		Pumps well attended.
12	7					Lat. by Ob. 47.21

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

24th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	7	1	E by S & S	N.E. by N.		
2	7	1				First part of this day
3	7	1				fresh breezes from N.E. by E.
4	7	1				and clear.
5	7	1				
6	7	1				Middle hours: Much the same.
7	7	1				
8	7	1				
9	8					Latter part: Moderate and
10	8					pleasant weather.
11	8		— " —	— " —		
12	8					All Sail at Throughout.
1	8					
2	8					
3	8					
4	6					
5	6					
6	6					
7	6					
8	6					
9	5					Lat. by Obs. 47.42.
10	5					
11	5		— " —	— " —		
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

25th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4		E by S	E by N		
2	4					
3	4					First part of This day light
4	4					breez from E.S.E and Fine.
5	3	/				
6	3	/				
7	3	/				Middle hours: Light baffling
8	3	/				airs from East to South.
9	2	/		E by S		
10	2	/				
11	2	/				
12	2	/				The day ends with the wind
1	2					very light from S.E. and
2	2					Pleasant weather.
3	2					
4	2					All Sail Set.
5	2			E by N		One Sail in Company.
6	3					
7	3					
8	3					Sat. 160. 47. 51.
9	3					Lg. 14. 40.
10	3					26 days out.
11	3		— " —	— " —		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

26th day of September 1870

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	3	/	E by S	S by E		
2	3	/				
3	3	/				Throughout this day light
4	3	/				airs from S.W. to West and
5	3	/				clear pleasant weather.
6	3	/		E.S.E.		
7	3	/				
8	3	/				
9	2	/				An English Ship in Company.
10	2	/				
11	2	/	— " —			
12	2	/				
1	2	/				
2	2	/		West		Sat. 160. 48. 00.
3	2					
4	2					
5	2					
6	2					
7	2					
8	2					
9	2					
10	2					
11	2		— " —	— " —		
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

27th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		E by S	West		
2	3					
3	3					
4	3					Wind very light from West
5	3					all this 24 hours — fine hazy
6	2					and pleasant weather.
7	2					
8	2					All drawing Sail Set.
9	1					
10	1					
11	1					At noon spoke the English
12	2		— " —	— " —		Bark "Jane Rose" from Jamaica
1	2					for London.
2	2					
3	2					
4	2					Lat. / 46. 48. N.
5	2	/				
6	2	/				
7	2	/				
8	2	/				
9	2	/				
10	3	/				
11	3	/				
12	3	/	— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

28th day of September 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3	/	East	West		
2	3	/				First part of this day light
3	3	/				Westerly airs and Pleasant.
4	3	/				
5	3					Middle hours: Calm.
6	3					
7	3					At 2 A.M. Light
8	1					light airs from S.E.
9			Calm			
10						The day ends with Light
11						N.E Winds and Cloudy.
12						
1						Great Britain in Company.
2						
3	2		E.S.E.	N.E		
4	2					
5	2					
6	2					Lat. / 46. 20.
7	2					
8	2					
9	2					
10	3					
11	3		"	"		
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 27th day of September 1870
1	5		East			
2	5					
3	5		E S E			Throughout this day light W. Easterly breeze and foggy.
4	5					
5	5					All hands at.
6	5		S E			
7	4					
8	4					
9	4	/				At 8 A.M. Took the Pilot "Fulton" 26 days from A. York for Liverpool.
10	4	/				
11	4	/				Pumps Attended.
12	4	/				Lat. obs. 47.46.
1	4	/				
2	4	/				
3	4					
4	4		S E			
5	4		S E			
6	4					
7	4					
8	4					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 30th day of September 1870
1	4		E S E	N E.		This day begins with light N. Easterly Wind & pleasant.
2	4					
3	4					At 8 P.M. Tacked to the N. Board
4	4					
5	4					
6	4					
7	4		S E	E. N E		Middle hours: Moderate Veering Easterly a little.
8	4		North			
9	4					
10	4					
11	4					
12	4					Latter part of this day, Wind East: Fresh breeze & foggy.
1	4		N E			
2	4					General Quarters in Company.
3	4					
4	4					
5	4					Lat. obs. 48.38.
6	4					
7	4					
8	4					
9	4	/	N. N E.	East		
10	4	/				
11	4	/				
12	4	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 1st day of October 1870
1	5	/	N. N E.			This day begins with Strong Easterly Wind & foggy.
2	5	/				
3	5	/				At 6 P.M. Took in light sails.
4	5	/				
5	5	/				Middle hours: Thick haze and cloudy.
6	5	/				
7	4	/	N E by N			At Midnight Took a Pilot.
8	4	/				
9	4	/	N. E			Latter part of the day part gales from East and clear weather.
10	4	/				
11	4	/				At noon Took in flying jib and Fore-Topgallant sails.
12	4	/				
1	4		S E			
2	4					
3	4					
4	4					Pumps well Attended.
5	4					
6	4					Lat. obs. 48.44.
7	4					
8	4					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 2d day of October 1870
1	4		S E by E			
2	4					First part of this day fresh Easterly gales moderating towards night.
3	4					
4	4					At 8 P.M. Tacked to the N. Eastward.
5	3					
6	3					
7	3					Middle hours: Moderate & clear.
8	3					
9	3		N E by N			Latter part of the day moderate breez from E. & E. S. E. and pleasant weather.
10	3					
11	4					At 8 A.M. Spoke all hands.
12	4					
1	4		N. E.			
2	4					
3	4					A large Steamer in sight steering East P.M.
4	4					
5	4		N E by E			Lat. obs. 49.04. Dy. 6.57.
6	4					
7	4					
8	4					
9	4					33 days out.
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3d day of October 18 70
1	5		N.E.			
2	5					Throughout this day moderate steady breeze from E.S.E and pleasant weather.
3	5					
4	5					
5	5					
6	5					
7	5		South	W.		At 6 P.M. made Cape Cod Light House bearing N.W. by W. distant 10 miles.
8	5					
9	5					
10	5					Steered South.
11	5					
12	5			S.		
1	5					Set Sail at 8 Throughout the day.
2	5					
3	5					
4	5					At noon Tacked to the S.E. Eastward
5	5					
6	5					
7	5		S.W.	W.		Lat by O. 41.48 S.
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 4th day of October 18 70
1	6	1	N.E.E			
2	6	1				Moderate from E. Eastward and pleasant all this day.
3	6	1				
4	6	1				Set Sail at.
5	6					
6	6					
7	6					
8	6					
9	6		E.S.E			At noon Spoke Falmouth pilot-boat.
10	6					
11	6					
12	6					
1	6					
2	6					Pumps Sounded.
3	6					
4	6		N.E.E			
5	6					Lat. by Ob. 42.56
6	6					
7	6					
8	6					
9	6					
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 5th day of October 18 70
1	3		S.S.E.			
2	3					This day commences with moderate breze from East and hazy.
3	3					
4	3					
5	3		S.E.by S			
6	3					
7	2	1				At 10 A.M. made the Lizards bearing S.E. East 7 miles.
8	2	1				Tacked to the Southward.
9	2	1				
10	2	1				Put the anchors in the cheeks.
11	2					
12	2					Middle hazy: moderate & thick.
1	2		S.S.E.			
2	2					At 4 A.M. Tacked to the South'd.
3	2					
4	2					This day ends with light airs from the Eastward & hazy.
5	2		S.S.E			
6	2					
7	2					
8	2					Lat. by Ob. 49.26.
9	1	1				
10	1	1				
11	1	1				
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 6th day of October 18 70
1	1	1	S.S.E.	East		
2	1	1				First part of this day Light Easterly winds & pleasant.
3	1	1				
4	1	1				At Sunset — Calm.
5	1					
6	1		N.E.by E			At 9 P.M. Saw Lizard Light-house N.E.
7	0					
8	0					
9	2		E.by S			Latter part of this day moderate breze from S.S.E & hazy.
10	2					
11	2					
12	2					At 0 A.M. Made Start Point.
1	2		East	S.S.E		
2	2					
3	3					
4	3					At noon Tacked ship, Start Point bearing N.E.by E. dist 4 miles.
5	3	1				
6	3	1				
7	3	1				
8	3	1				
9	4		E.by S			Pumps Sounded.
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5	1	SbyW.			7th day of October 1870
2	5	1				This day commences with a light breeze from the South'd.
3	5	1				At 4 P.M. Tacked ship.
4	5	1				
5	5		E by S			
6	5					Light wind & cloudy through the night.
7	5					
8	5					
9	5					At 5 A.M. Made Portland lights bearing S.E. by S. dist 20 miles.
10	5					
11	5					
12	5					Latter part of the day mid. moderate from South.
1	4			South'ly.		
2	4					
3	4					
4	4					
5	4					At noon sighted the Isle of Wight bearing N.E. dist about 30 miles.
6	5		E by S			
7	5					
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	4		E by S	South		8th day of October 1870
2	4					
3	4					First part of this day light
4	5					Southerly wind decreasing
5	5					towards night to a perfect
6	7					calm.
7	6					At 7 P.M. Made
8	6					Beachy Head light bearing
9	6					E. by S dist 18 miles.
10	6					At midnight mid passing
11	6		E by S			and exchanging Fowla light sails.
12	6					At 1 A.M. Made Cuckmere
1	6			S.S.W.		light dist 12 miles.
2	6					At 2 A.M. Wind increased
3	6		S by E	S.W.		to a gale and set in the storm
4	6					sails, everything but the Double
5	6					and Jib.
6	6					At 5 A.M. Made South
7	6					Foreland light took a Deal pilot
8	6					and run into the Downs. And
9	6					at 8 A.M. Came to anchor with
10	6					best bower & fifty fathoms of cable
11	6			— " —		
12	6					The day ends with hard gales
						from S.W. and clear weather
						Pumps well attended.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1						9th day of October 1870
2						
3						This day commences with a
4						gale from W.S.W. At 4 A.M. took
5	5		N.E.	S.W.		pilot on board. Under reefed
6	5					and set the fore & main sails
7	6					all drawing sail.
8	7					Wind moderating with rain.
9	7	1				At 6 A.M. Ramsgate Pier &
10	7	1				light-ship N.E. dist 2 miles.
11	9			West		At 10 Calliper light-ship
12	9					ESE. 5 miles.
1	9					Middle hours: Hazy gale
2	9					from West & clear.
3	9					At Midnight took in
4	8					the Royals & foretopmast Staysail.
5	8					
6	8					Latter part of the day hazy
7	8					with rain. Considerable
8	8					head sea on. Weather looking
9	8					bad.
10	8			— " —		Lat. obs. 53.06.
11	8					Dy. 3.30 E
12	8					40 days out.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
		38.27	42.28	27.32					

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4	1	NE½N	West		10th day of October 1870
2	4	1				This day begins with the wind West
3	2		East	S.S.E.		and threatening weather.
4	2		S.W.			Took in the Royal yard & G.
5	2					At 2 P.M. Wind shifted
6	2					to S.S.E and increased to
7	2					a gale. Took in everything but
8	2					the Lower Stsails & Reefed
9	2					Spanker and hove to. At
10	2					midnight Wind
11	2		West	S.S.W		S.W. and set Stsails and set the
12	2					reefed upper topsails & reefed
1	2	1	S.S.E	S.W.		foresail.
2	2	1				
3	2	1				At 8 A.M. Wind hauling
4	2	1				Southerly. Close reefed and set
5	2	1				Jib and reefed mainsail.
6	2	1	S.E.	S.S.W.		The day ends with hard
7	2	1				gales from S.S.W & squally.
8	2	1				
9	2	1	S.W.	S.S.E		Pumps well attended.
10	3					Lat. obs. 53.16.
11	3	1				Dy. 2.07.
12	3	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Philadelphia towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 11th day of October 1870
1	8		N.E.S.			
2	8				2 pts.	First part of this day hard gales from the Northward and clear weather.
3	8					
4	8					
5	2					At 5 P.M. Took in the
6	2				3 pts	upper Topsails, Jib & Mainsail.
7	2		N.N.E.			
8	2					
9	2					Very heavy Squalls from North. during the night.
10	2					
11	2					At 8 A.M. Bid adieu
12	2					to the Westward. Bore Up
1	2					and Set reefed upper Topsails,
2	2					Jib and reefed Mainsail.
3	2					
4	2					The day ends with fresh
5	2		West	N.N.W.		gales from N.W. with frequent
6	2					Squalls.
7	2					At noon turned out all reefs.
8	2					
9	4		N.E.	N.W.		Pumps Attended.
10	4					
11	4					Lat. by D.R. 53.00.
12	4					Long. 8.38.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 12th day of October 1870
1	4		N.E.by.N.	N.N.W.		This day begins with the
2	4					wind stiff from N.N.W. and
3	4					squally. At 4 P.M. Set
4	4					the Mizen Top-gallant Sail.
5	5	1				At Sundown more Moderate
6	5	1				At 6 P.M. Kept off East and
7	5	1	N.E.			Set all drawing Sail.
8	5	1				
9	6		East	West		Middle hours: Wind Best
10	6					Moderate a Head.
11	6					At 1 A.M. Made
12	6					the Schilling light bearing
1	6					S.E. dist 12 miles.
2	7		E.by.E			
3	7					Latter part of the day wind
4	7					fresh from S.W. and hazy.
5	6					
6	6					All Sail set.
7	4					
8	4		East	S.W.		Lat. by D.R. 53.47.
9	6					Long. 6.05.
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Philadelphia towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 13th day of October 1870
1	7		E.by.S.	S.W.		This day comes in with an
2	7					increasing Breeze from S.W.
3	7					Took in Light Sails.
4	7					At 5 P.M. Bid Sandy
5	7		E.by.S	South		Southerly and blowing hard.
6	7				2 pts	Took in everything but the
7	4					Lower Topsails, Reefed Foresail
8	3					and reefed Spanker.
9	2		N.by.W			At 8 P.M. Blowing
10	2				4 pts	a severe gale. Hove to, Took
11	2					in Foresail and Jib. Upper
12	2					and Lower Topsail
1	2					and Hove to on the Port Tack.
2	2					At 12 A.M. Bore Up,
3	2		S.by.E.	S.W.		Bid Sandy to the Westward
4	2					Struck a Sail.
5	2					At 6 A.M. made Heligoland
6	2					bearing East dist. 10 miles.
7	2					Bid Moderately. Set reefed
8	4					upper Topsails, Hoisted Foresail
9	5					and reefed Mainsail.
10	5					At 10 made the Land
11	5					at the mouth of the River.
12	5					Saw three Ships ashore but

no Signs of Pilots, Steamers.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of October 1870
1						& Buoys. Hove to to
2						Stand off and on after saw a
3						Pilot boat Standing out.
4						Hove to and stood for her.
5						At noon took a Bremen Pilot
6						on board and proceeded up the
7						River. Turned out all reefs and
8						set Top-gallant Sails. Wind
9						E.S.E. Thick and rainy.
10						At 4 P.M. Came to an anchor
11						off Bremerhaven and finished
12						Hauling. At 8 Strong winds.
1						At Midnight Wind fresh from
2						N.N.W. Clear and Cold.
3						This day Contains the Remarks
4						for thirty-six hours and ends
5						as Hop.
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Saying in towards Bremerhaven.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Friday October	14th		Light Southerly wind and pleasant weather. At 10 P.M. towboat came alongside. Hove up the anchor and went into Geestemunde dock. Made fast with mooring chains and Bow chain.
2						
3						
4						
5						
6						
7						
8						
9			Saturday	15th		Westerly wind and pleasant. Cooked Cabin today. One man deserted the ship.
10						
11						
12						
1			Sunday	16th		Strong Southerly wind and cold.
2						
3			Monday	17th		Cold and rainy. Worked half a day discharging Cargo.
4						
5						
6						
7			Tuesday	18th		No Cargo discharged to-day.
8						
9						
10			Wednesday	19th		Pleasant weather. Unbent the Jibs and Set Upsail.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Thursday	20th		Blowing a gale from S. E and rainy. Worked half a day discharging Cargo. Thos Williams Cooper absent from the Ship without leave.
2						
3						
4						
5						
6			Friday	21st		Pleasant weather. Discharged no Cargo to-day. Bank laid up.
7						
8						
9			Saturday	22d		Southerly wind and pleasant. Worked all day discharging Finished the between decks.
10						
11						
12						
1			Sunday	23d		Strong Southerly wind and cold. Left the Ship by Williams to the Hospital with a broken arm.
2						
3						
4						
5						
6			Monday	24th		Pleasant weather. Worked all day discharging. Three men deserted the Ship.
7						
8						
9						
10			Tuesday	25th		Strong Easterly winds & cold. Discharged all day.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Saying in towards Bremerhaven.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Wednesday October	26th		Strong westerly gales & rainy. Worked all day discharging.
2						
3						
4						
5			Thursday	27th		Cold rainy and blowing. Discharging Cargo all day. Two men of crew deserting Ship.
6						
7						
8						
9			Friday	28th		Pleasant to-day for a wonder Discharging Cargo. Repairing Ship.
10						
11						
12						
1			Saturday	29th		Blowing a gale from Eastward. Finished discharging Cargo.
2						
3						
4						
5						
6			Sunday	30th		Hard gale from N. W and Cold to-day.
7						
8						
9						
10						
11						
12						

W Barnes

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Monday	31st		Light Westerly wind & pleasant. Hauled out of Geestemunde Dock and into Bremerhaven Old dock. Made fast at the Railway Warehouse.
2						
3						
4						
5						
6			Tuesday	November 1st		Light N. Easterly wind & fine. Cooked Cabin today. Employed putting dunnage wood in the dock &c.
7						
8						
9						
10						
11						
12			Wednesday	2d		N. Easterly wind and pleasant. Employed stacking the dock &c. Rigged in the Jib boom. Cabin boy came back from the Hospital.
1						
2						
3						
4						
5						
6			Thursday	3d		Light Easterly wind & Cold. Employed stacking out the dock. Stevedore's men at work trimming ballast. (Ship "Golden Rule" left to-day)
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Laying in towards Bremerhaven.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Friday	November 4th		Easterly wind & pleasant. Finished washing the hold. Cabin boy left the ship.
2						
3						
4						
5						
6			Saturday	5th		Commenced loading for S. Jon Smoked the hold. Hoisted Mizen of line & pitriol.
7						
8						
9						
10						
11			Sunday	6th		Wind Easterly. Clear and cold.
12						
1			Monday	7th		Pleasant weather. Monday Taking in Cargo. Commenced to paint outside.
2						
3						
4						
5						
6			Tuesday	8th		Easterly wind & fine. Taking in Cargo all day.
7						
8						
9						
10			Wednesday	9th		Wind S.E. & rainy. So Cargo to-day.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
1			Thursday	10th		Pleasant weather. Took in Cargo
2						all day. One man left the ship.
3						
4						
5						
6			Friday	11th		Wind Easterly and pleasant.
7						Taking in Cargo all day. Painting
8						outside &c.
9						
10						
11			Saturday	12th		Wind Easterly & snowing. Off
12						night set in a heavy gale from
1						N.W. So Cargo to-day.
2						
3			Sunday	13th		Blowing a very heavy gale
4						from N.W. Cold with Hail
5						and Snow.
6						
7			Monday	14th		A Lull from N.W. & Rainy
8						Took in Cargo all day.
9						
10						
11			Tuesday	15th		Moderate and pleasant.
12						So Cargo to-day.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Laying in towards Bremerhaven.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Wednesday	November 16th		Wind N.W. Blowing a gale.
2						Took in Cargo in the afternoon.
3						
4						
5			Thursday	17th		Strong N.W. wind and cold.
6						Worked part of the day taking in Cargo
7						
8						
9			Friday	18th		Moderate and pleasant hand
10						sails to dry. Took in Cargo
11						all day.
12						
1			Saturday	19th		Moderate and foggy. So
2						Cargo to-day. Left down the Fore
3						Royal yard
4						
5						
6			Sunday	20th		Moderate Southerly wind and
7						pleasant. Bark "Hattie M." sailed
8						to-day.
9						
10			Monday	21st		Southerly wind & pleasant.
11						Worked all day loading.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Tuesday	22nd		Moderate and pleasant.
2						Took in Cargo all day.
3						Cooked sails to dry.
4						
5						
6			Wednesday	23rd		Blowing a hard gale from
7						S.W. Took in Cargo all day.
8						Sailors repairing blocks &c.
9						
10						
11			Thursday	24th		Strong S.W. Wind. Worked half
12						a day loading.
1						
2						
3			Friday	25th		Moderate Southerly wind and
4						pleasant. Took in Cargo all
5						day. Put new main thrail
6						and left topsail.
7						
8						
9			Saturday	26th		Light Easterly wind & pleasant.
10						Worked all day loading.
11						Took in Coal, potatoes &c.
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Laying in towards Bremerhaven

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Sunday			November 27th Moderate & pleasant.
2						
3						
4			Monday			28th Light Southerly wind & fine Worked all day loading.
5						
6						
7			Tuesday			29th Moderate and fine. Ast Do Forecast. Finished loading drawing 15.8 forward. 15.7 aft.
8						
9						
10						
11						
12			Wednesday			30th Light Easterly airs & pleasant.
1						At 9 A.M. Crew came aboard Hauled down to the dock gates filled water &c.
2						
3						
4						
5						At 6 P.M. towed into the stream and came to with Best anchor and 35 fathoms of chain.
6						
7						
8			Thursday	December	1st	Fresh N.E. wind and cold At 4 Lead gear. Got Pilot and Tug and cleared everything ready for sea. Wind moderate at Sundown.
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
1			Friday			2d At 7 A.M. Pilot came aboard and tow boat came alongside. Shd Anchor and steered down river Calm and foggy. At 11 anchored near the light-boat keeping a good look out. At 1 past 1 P.M. weighed & proceeded down river.
2						
3						
4						
5						
6						
7						
8						
9			Saturday			3d At 10 A.M. Let go anchor with wind fresh from S.E. Let go sail & Course & D. ballast sails. This day Contains the remarks for twelve hours only and Commences Reckoning
10						
11						
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York &c.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of December 18 70
1						
2						This day begins with fresh
3	5		N.W.	N.E.		N. Easterly wind & cloudy.
4	6					
5	6		W.N.W.	East		At 2 P.M. discharged the Bremen pilots at the mouth of the river.
6	6					Wind Sounding Easterly with
7	6					many head seas.
8	6			E.S.E.		
9	5	1				Middle hours: Wind E.S.E.
10	5	1				moderate.
11	5	1				
12	5	1				
1	5	1	W.S.W.			
2	5	1				
3	5	1				Latter part of the day moderate
4	5	1	W.S.W.			from East and pleasant.
5	5					
6	5			East		So. & W.
7	5		W.S.W.			Cst. of U.K.
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 5th day of December 18 70
1	2	1	S.W.	Baffling		First part of this day light
2	2	1				baffling Easterly airs.
3	2	1				
4	2	1	W.S.W.			At Midnight moderate
5	1					fresh N.W. and cloudy.
6	1					
7	1		W.S.	Southerly		At 4 A.M. wind beginning
8	1					backed to the Southward and
9	1					pushed light sails.
10	2					
11	2					At 8 A.M. backed to the
12	2					S.W. and set all sail.
1	3		S.W. by W.	S.W.		
2	3					
3	4					Latter part of the day light
4	5					S.W. wind & Cloudy weather.
5	5		S.W. by S.			
6	5					
7	5					Cst. of Ire. 52. 40.
8	5					
9	6		W.S.W.			
10	7					
11	7					
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 6th day of December 1870
1	8		S by W	Best N		First part of this day moderate from Best N and cloudy.
2	8					
3	5					At 8 P.M. tacked to the South'd.
4	5					
5	5					Middle hours: Fresh from West and clear.
6	5					
7	6					
8	6					
9	6		SW by W	West		At Midnight tacked ship.
10	6					
11	6					
12	6					At 4 A.M. Sailed light Sail and Foretop-gallant Sail.
1	5		SSW 1/2 W			
2	5					Latter part of the day strong West wind & cloudy.
3	5					
4	5					
5	5					At 10 A.M. Made South Hilder light-ship bearing West dist 7 miles. Tacked to the Southward.
6	4					
7	4					
8	4					
9	4				— "	
10	4					
11	4		SW by W			
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS	LEEWAY.	REMARKS. 7th day of December 1870
1	4	1	SW by W	West		This day begins with the wind moderate from West & cloudy.
2	4	1				
3	4	1				
4	4	1				
5	5					At 8 P.M. Tacked ship.
6	5		SW by W			
7	5					
8	5					At Midnight moderate from S.W. Got all Sail.
9	2		SW by W			
10	2					At 4 A.M. Wind hauling Southerly and freshening with rain.
11	2					
12	2					
1	4		SW by S	SW by W		At 6 A.M. passed Sailed light-ship,
2	4					At 7 made South Foreland
3	4					Wind strong from S.W. Took in the Light Sails.
4	6					
5	6					
6	6					At noon Near Castle
7	6			SW by W	SW by S	Rose South (by Compass) distant
8	6		NW by W			2 miles.
9	6					Wind S.W. by S and clear.
10	6					
11	6		W by S			
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 8th day of December 1870
1	8		W by S	Southerly		
2	8					First part of the day strong
3	8					Southerly wind and clear.
4	8					At 2 P.M. tacked ship
5	8		W 1/2 S			the South Gravelines Pilot off Gravelines.
6	10					
7	10		W by S			At 6 P.M. passed Beachy Head
8	10					light distant 6 miles.
9	10			S.W. by S.		
10	10					Middle hours: Fresh from the S.W. by S and overcast.
11	9					
12	9					At 4 A.M. passed
1	9					Portland lights dist. 10 miles.
2	9					
3	8					Latter part of the day
4	8					light S. Easterly wind Dying
5	8		W 1/2 S			out towards noon.
6	7					
7	7			S.E.		At noon Start Point
8	7					light-house bore North
9	6					dist. 6 miles.
10	6					
11	4					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 9th day of December 1870
1	1		W N.W	Southerly		This day Commences with light
2	1					baffling S. Easterly airs.
3	1					
4	1					At 6 A.M. Start Point light
5	2		West			bore N.E dist 15 miles
6	3					
7	4		SW by W	Southerly		First part of the night light
8	4					and baffling. At 4 A.M. Left
9	4					a light Lugger from E.N.E.
10	4					
11	2					Latter part of the day
12	2					light Easterly wind nearly
1	0					Calm at noon.
2	5		W by S	E by S		
3	5					Grand Vessels in Company.
4	4					
5	4					
6	4					Lat. by Ob. 49.25.
7	4		West			Long. E. 15.
8	4					
9	4					
10	4					
11	2					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 10th day of December 1870
1			Calm			First part of this day. Calm.
2						
3						
4						At 6 P.M. Light breeze from South. All Sail Set.
5						
6						
7	2		W by N	South		Wind increasing towards morning and veering East by S.
8	2					
9	2				S S E	
10	2	1				
11	2	1	W by N ½ N			At 8 P.M. Took in the Royals and all fore and aft Sail.
12	2					
1	2					
2	2				S E	The day ends with strong Gale from S E by E with Heavy looking Clouds.
3	2					
4	2					
5	2					Set Second Reef Main Sail.
6	2					
7	2				S E by E	Pumps Attended.
8	2					
9	2	1				Lat by O. 49. 15.
10	2	1				Lg. by D. 40
11	2	1	"	"		
12	2	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 11th day of December 1870
1	2	1	W by N ½ N	S E by E		This day Comes in with strong gales from N. East and Light Rain.
2	2	1				At 4 P.M. Furled to th-gallant Sails.
3	2	1				
4	2	1				
5	2					At 6 Took in the Fore Topsail and Mainsail and Reefed the Foresail blowing a heavy gale from S. E.
6	2		N by W			
7	2					
8	2					First part of the night blowing very hard, moderating at Midnight & Sailing Southerly.
9	2					
10	2					
11	2					
12	2					
1	2			South		At 4 A.M. Got the Fore Topsail Yard Aback & Reefed Mainsail.
2	2					
3	2					Latter part of the day moderate from S. Eastward.
4	2					
5	2					
6	2					At noon Got all Sail.
7	2					
8	2					
9	2			South		Lat by O. 49. 81.
10	2			S by W		Lg. 12. 82
11	2					Eight days out.
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 12th day of December 1870
1	5		N by W	Contrary		
2	5					First part of this day moderate Southerly Wind increasing towards night. Took in Light Sails and at 8 P.M. reefed the Topsails and Courses.
3	5					
4	5					
5	4					
6	4					
7	4					
8	4					At Midnight blowing a Gale from N. N. W. Steering Looking weather. Took in every thing but the Lower Topsails
9	4		N by W	N by W	2 pts	
10	4					
11	3					
12	2					At 4 A.M. Brisk Gales Southerly and moderating. Set reefs and made sail.
1	2				4 pts	
2	2					
3	2					The day ends with fresh Gales from N. by W and Clear.
4	2					
5	2					At noon out all reefs and set Main t'gallant Sail.
6	2					
7	2		South	W by W		Pumps well attended.
8	2					
9	2		S W			Lat by O. 49. 05.
10	4					Lg. 15. 40.
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 13th day of December 1870
1	3		S W ½ S	W by W		This day begins with fresh breezes from W. N. W dying away at night
2	3					
3	3					
4	3					At Midnight got a light breeze from S. S. E. Set all Sail.
5	2					
6	2					
7	1					
8	1					
9			Calm.			
10						
11						
12						
1	2		N by W	S S E		Latter part of the day fine breeze from S E by E and Cloudy.
2	3					
3	3					All drawing Sail Set.
4	4					
5	5			S E		Lat by O. 49. 20.
6	5					Lg. 14. 45.
7	6					
8	6			S E by E		
9	6					
10	6					
11	6					
12	6		"	"		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of December 1870
1	6		NNW ½ W	SE		
2	6					First part of this day moderate
3	6					from SE and thick.
4	5					At 8 P.M. wind
5	5					died out nearly Calm, weather
6	5					looking bad, took in light Sails
7	2					and Mainsail.
8	2					At 10 P.M. wind shifted
9	1					to N.N.W and began to freep
10	1					up. At Midnight took in
11	1		SW	NNW 8 pts		every thing but the lower Topsails
12	1					reefed Foresail and Shifted
1	2					
2	2					At 6 A.M. Took in the Foresail.
3	2					The day ends with a
4	2					very heavy Squall from NW
5	2				4 pts	and Clear weather.
6	2					At noon took in the Fore topsail
7	1	1				and balance reefed the Sheets.
8	1	1				
9	1	1				Pumps well Attended.
10	1	1				Lat. by Ob. 49.12.
11	1	1	— " —	— " —		Lng. 15.30.
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 15th day of December 1870
1			SW	West	6 pts	
2						This day Commences with hard
3						Squally gales & clear weather
4						
5						At Midnight more moderate
6						Close Reef, and at 2 A.M. set
7						Fore-topsail & reefed Foresail.
8						
9						At 6 A.M. Moderate. Made sail
10						and set & Gt every thing.
11						
12						Latter part of the day moderate
1			NW	NW by W	4 pts	SW wind & pleasant.
2						
3	2					Rough confused sea on.
4	2					
5	2					Pumps Attended.
6	2					
7	2		NNW	SW		Lat. by Ob. 49.37.
8	2					Lng. 16.15.
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 16th day of December 1870
1	5		NNW ½ W	SSW		
2	5					First part of this day
3	5			SW by S		moderate Squally with heavy
4	5					Easterly.
5	5			S E		
6	5					
7	5					Middle part; Fresh
8	5					from the Eastward dealing
9	7					Northerly.
10	7					
11	7			East		Latter part of the day
12	7		— " —			fine Steady breeze from the
1	7					N. E and pleasant weather.
2	7					
3	7			E by E		All Sail Set.
4	7					
5	7					
6	7			N E		Lat. by Ob. 49.47.
7	7					Lng. 20.52.
8	7					
9	7					
10	7					
11	7		— " —	— " —		
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 17th day of December 1870
1	5		NNW ½ W	ENE		
2	5					This day Commences with moderate
3	5					breeze from ENE & Clear.
4	5					At 8 A.M. nearly Calm.
5	5					
6	5					At 2 P.M. Sta Light
7	2					bearg from S.S.W increasing
8	2					towards morning.
9	2			SE		At 8 P.M. took in light Sails.
10	2					
11	2					Latter part of the day, Fresh
12	2					gales from SW and cloudy.
1	2					Took in the Mizzen gallant Sails
2	2			SSW		and at noon reefed the
3	3					topsails & Courses. Hauled Jib.
4	3					
5	5					Pumps well attended.
6	5					
7	6			SW		Lat. by Ob. 50.05.
8	6					Lng. 23.10.
9	6	/				
10	6	/				
11	6	/				
12	6	/	— " —	— " —		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

18th day of December 1870

H	K	F	COURSES.	WINDS.	LEEWAY.
1	3	/	NNW½W	L.W.	
2	3	/			
3	3	/			
4	3	/			
5	3	/			
6	3	/			
7	3				
8	3			S.S.W.	
9	3				
10	3				
11	3				
12	3				
1	3		— " —		
2	3				
3	3				
4	3				
5	3				
6	3				
7	3				
8	3			S.W.	
9	4	/			
10	4	/			
11	4	/	— " —	— " —	
12	4	/			

This day Comes in with pressels from L.P.R. & C.M. took in upper t'gallt sails and mainsail.

Middle hours: Wind about S.S.W. blowing hard and thick weather.

At 8 A.M. Came moderate. Let reefed upper t'gallt sails and reefed mainsail.

The day ends with strong S.W. gales and thick weather. Cleared out all the reefs. Let fly the reefs stay-sd.

Pumps well attended.

So Obs.

Lat. / D.R. 60.27.

Lon. 25.00

15 days out.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

20th day of December 1870

H	K	F	COURSES.	WINDS.	LEEWAY.
1	1		NNW	N. Easterly	
2	2				
3	2				
4	2				
5	3				
6	3				
7	4		SW		
8	4				
9	4	/	S.S.W	West	
10	4	/			
11	4	/			
12	4	/			
1	4	/	S.W	W.S.W	
2	4	/			
3	4	/			
4	4	/			
5	5		W.N.W	S.W	
6	5				
7	5				
8	6				
9	6				
10	6				
11	6		— " —	— " —	
12	6				

First part of this day Fresh N. Easterly Wind and clear.

Let t'gallt sails.

Middle hours: Moderate part West. At 5 A.M. took in t'gallt sails and set all sail.

The day ends with strong S.W. wind. thick & rainy.

Cook is Royal & t'gallt sail.

So Obs.

Lat. D.R. 51.00.

Lon. 28.10.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

19th day of December 1871

H	K	F	COURSES	WINDS	LEEWAY.
1	4		N.W.	S.Easterly	2½
2	4				
3	4	/			0
4	4	/			
5	4	/			1
6	4	/			
7	5		NW½W		1
8	5				¼
9	4				12
10	4		N.N.W.	West	
11	4				
12	4				
1	4				
2	4				
3	3				
4	3				
5	2		NEbE	N.W	
6	2				
7	2				
8	2				
9	2				
10	2				
11	2				
12	2				

This day Commences with moderate breezes from S. Eastward & thick. Let t'gallt sails.

Middle hours: Bird hauling westerly and blowing pock. Took in t'gallt sails and at 4 A.M. reefed t'sails and courses.

Latter part of the day Bird S. By & clear weather.

At noon Bore clear and turned out all the reefs.

Pumps attended.

Lat. / D.R. 51.54.

Lon. 27.00.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

21st day of December 1870

H	K	F	COURSES.	WINDS.	LEEWAY.
1	7	/	E.N.E	S.W.S	
2	7	/			
3	7	/			
4	7	/			
5	7	/			
6	7	/			
7	8				
8	8				
9	7				
10	7				
11	4		NEbE	S.E.bS	
12	4				
1	1	/	E.S.E		
2	1	/			
3	1	/			
4	1	/			
5	1	/			
6	1	/			
7	1	/			
8	1	/			
9	3				
10	3				
11	3		— " —	— " —	
12	3				

This day Commences with strong S. Westerly wind and thick.

At 8 P.M. Took in t'gallt sails. At 10 Bird Southerly shifted to S.S.E. and blew a gale. Took in sail as fast as possible to R. Courses & t'sails. and at midnight Bore clear.

Blew hard until 5 A.M. when it commenced to moderate. At 8 A.M. Set t'gallt sails, reefed Courses, fit and Rann t'gallt stay sail.

The day ends with fresh gales from S.S.E. and clear weather.

Pumps well attended.

Lat. / D. 50.18.

Lon. 29.50.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 22nd day of December 1870
1	3		S.W.	W.S.W.		First part of this day mod. & fair from S.S.W. moderating towards night.
2	3					At 8 P.M. tacked to the S. Wind set t'gallant Sails.
3	3					
4	3					
5	3					
6	3					Middle hours: Wind S. Westerly. Fresh & squally.
7	3		S.W.by S.			
8	3					
9	4	1	S.W.	W.S.W.		
10	4	1				At 8 A.M. Wind increased to a gale. Shortened Sail & squalls & at noon hove to under the lower main t'sail & reefed Foresail. Blowing heavy from West & clear.
11	6	1	S.W.by W.	S.W.by S.		
12	6	1				
1	6	1				
2	6	1				
3	6	1				
4	6	1	S.W.			Total Eclipse of the Sun this forenoon. Commencing about 2 and ending at 11 A.M. Quite dark for about three-quarters of an hour.
5	6	1				
6	6	1				
7	6	1				
8	6	1				
9	5		S.W.by W.	West		Pumps well attended. Lat. obs. 46.50.32. Long. G.R. 31.50.
10	5					
11	2	2				
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 23rd day of December 1870
1			S.S.W.	West	4 1/2	This day Commences with heavy Westerly gales & clear weather.
2						
3						
4						
5						
6						At 6 P.M. Took in the weather clew of the Main t'sail. Brailed it up. Very heavy squalls from
7			S.S.W.			
8						West to N.W. through the night.
9						Set reefing Topsl.
10						
11						
12						Latter part of the day Strong gale from N.W. with occasional hail Squalls.
1						
2						At 8 A.M. Set the lower T'sails & reefed courses. Saw a big Iceberg East.
3						
4	1 1/2		S.W.by W.	S.W.		
5						Pumps Carefully attended.
6						
7						Lat. obs. 46.50.58.
8						Long. 30.12.
9	2	1				
10	2	1			3.40	
11	2	1				
12	2	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 24th day of December 1870
1	2		S.W.by W.	S.W.		This day comes in with strong N.W. gales and light sea.
2	2					
3	2					First part of the night moderate increasing to a gale again at
4	2					midnight and hauling to westward.
5	2					
6	2					At 7 A.M. Set Reefed upper T'sails, Set a Main t'mast
7	2					Stay-Sail.
8	2					
9	2		W.by W.			The day ends with fresh gales from North and clear
10	1					weather.
11	1					
12	2					At noon turned reefs out of the T'sails.
1	2	1	West			
2	2	1		North		Pumps well attended.
3	2	1				Lat. obs. 46.49.35.
4	2	1				Long. 30.50.
5	3					
6	3					
7	3		W.by S.			
8	3					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 25th day of December 1870
1	5		W.by W.	S.W.		First part of this day moderating breeze from S.W. & clear.
2	5					Turned out all reefs and
3	5					set T'gallant Sails.
4	6					First part of the night
5	4					Calm. At midnight hauled up
6	4					from S.S.W. Tacked Ship and
7	3					set everything.
8	2					Wind increasing
9						towards morning. Took in T'-
10			Calm			gallant Sails.
11						
12						Latter part of the day. Strong
1	2		W.S.W.	S.S.W.		gale from South. Shifting squally.
2	3					At 8 A.M. Reefed the Courses
3	5					and T'sails. Furled Spanker
4	5					and Jib.
5	7					Vessel taking heavy sea under
6	7		S.W.by W.	South		her stern.
7	7					
8	7					So 06.
9	6	6				Lat. D.R. 49.00.
10	6					Long. 32.50.
11	5					22 days out.
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 26th day of December 1870
1	4		NbyW	S.S.W.	1 kt	This day commences with a strong Southerly gale rowling Westerly. Split a sail & Took in the upper Topsails.
2	4					
3	4					
4	4			SW		
5	3		NW		3 pts	
6	3			WSW		
7	3					
8	3					
9	3		NNW	West		Middle hours: Hard Westerly gales and clear weather. At 4 A.M. Took in everything but the Lower main Topsail and reefs Ship.
10	3					
11	3					
12	3					
1	2	1				
2	2	1				
3	2	1				
4	2	1				Remainder of the day blowing a fresh gale from N.W. with Heavy Showers & light sea running. Ran a Log & Ship running 6 pd the mid. Pumps well attended.
5	1	1	SbyW	NW	6 pts	
6	1	1				
7	1	1				
8	1	1				
9	1	1				
10	1	1				
11	1	1	"	"		
12	1	1				

Lat. Ob. 49.18.
Long. 33.00.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 28th day of December 1870
1	3		SbyW	N.W.	1 kt.	First part of this day hard N. Westerly gales & high sea. Moderating at night and sea going down. Made sail.
2	3					
3	3					
4	3		WbyS	N.NW		
5	3	1				At Midnight set all reefs and set Main Top gallant sail.
6	3	1				
7	3	1				At 3 A.M. Bore up & Ship. Wind dawling Westerly.
8	3	1				
9	4		SbyW			At 5 A.M. Wind increased to a gale. Furled upper Topsails and reefed the Courses.
10	4					
11	4					
12	4					
1	4		SbyS	BatW		At 9 Took in the Courses and got Storm a heavy gale from SW.
2	4					
3	5		NbyW			
4	5					At noon Wind Shifted to N.W. Bore Ship and Took in the Fore Topsail.
5	5		NbyW	SW		
6	5					
7	4				1 pt	Pumps well attended.
8	4					Lat. Ob.
9	3					Lat. D.R. 48.20.
10	2				3 pts	Long. 33.20.
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS	LEEWAY.	REMARKS. 27th day of December 1870
1			SbyW			
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4						
5						
6						
7	3		WSW		3 pts	
8	3					
9	3	1				
10	3	1				
11	3	1				
12	3	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. This day Comes in with heavy gales from N. Eastward and high Sea running — Clear weather with frequent heavy hail-squalls. Middle hours: Same. At 6 A.M. Set Fore Topsail. At 8 Set the Reefed Courses. The day ends with hard N. Westerly gales and Clear weather High sea running. Pumps Carefully attended.
1	2		SbyW	S.W.	6 pts	
2	2					
3	2					
4	2				8 pts	
5	3					
6	3					
7	4			North	1 pt.	
8	4					
9	4					
10	4					
11	4		NbyW			
12	4					
1	4					
2	4					
3	4					
4	4					
5	5					
6	5					
7	5		NbyW	NW		
8	5					
9	5					
10	5					
11	5					
12	5					

Lat. Ob. 47.10.
Long. 33.40.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 29th day of December 1870
1	2		WbyS	S.W.	6 pts	This day commences with heavy N.W. gales & high sea. At 4 A.M. More moderate. Set Fore-Topsail & reefed Courses. Middle hours. Heavy gale from North with heavy squalls. Set reefed upper Topsails. Latter part of the day. Wind moderate from N.W. and fine weather. At 8 A.M. Made all sail. Pumps Attended.
2	2					
3	2				8 pts	
4	2					
5	3					
6	3			North	1 pt.	
7	4					
8	4					
9	4					
10	4					
11	4		NbyW			
12	4					
1	4					
2	4					
3	4					
4	4					
5	5					
6	5					
7	5		WbyS	SW		
8	5					
9	5					
10	5					
11	5					
12	5					

Lat. Ob. 47.10.
Long. 33.40.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 30th day of December 18 70
1	4		N.E. & N.	S.W.		
2	4					This day commences with light S.W. blowing wind and pleasant weather.
3	4					
4	4					
5	4		S.W.	W. & W.S.W.		At 8 P.M. Tacked & stood Northward, wind veering W.S.W.
6	4					
7	4		S.S.W.	West		
8	4					
9	5		W.S.W.			Middle hours: Wind increasing and veering to the Southward.
10	5					At 10 took in Main Royals.
11	6					At 4 A.M. Reefed the topsails and courses.
12	6					
1	6		N.W. by W.			
2	6					
3	5					Latter part of the day Cloudy a gale from N.W. West Cloudy weather.
4	5					
5	4		N.W.	W.N.W.	2 pts	
6	4					Pumps well attended.
7	4					
8	4					
9	4					24 Obs.
10	4					Lat. by R. 47.25.
11	4					Lng. 35.00.
12	4		— "	— "		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 31st day of December 18 70
1	6	1	N.W. by W.	N. by E.	2 pts.	
2	6	1				First part of this day strong gale from N.E. by E. Cloudy.
3	6	1				
4	6	1				
5	6	1				
6	6	1				At 8 P.M. Took in Mainsail, Jib and after Topsail.
7	6	1	N.W.	N.W.		
8	6	1				
9	6	1			4 pts.	At Midnight Took in Foresail and Fore Topsail blowing a heavy gale from N.N.W. a high sea.
10	6	1				
11	6	1				
12	6	1				
1	6	1				At noon Wind hauling westerly. Brought to, blowing a fresh gale from West and very high sea running.
2	6	1			6 pts	
3	6	1				
4	6	1				
5	6	1				Pumps carefully attended.
6	6	1				
7	6	1				
8	6	1				24 Obs.
9	6	1				Lat. by R. 48.30.
10	6	1		West		Lng. 35.50.
11	6	1				
12	6	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 1st day of January 18 71
1	6	1	S.W. by W.	S.W. by W.	6 pts	
2	6	1				Blowing a fresh gale from N. Hauled to first part of this day and high sea running.
3	6	1				
4	6	1				This Rolling badly. Took in Q.R. Shifted at sea.
5	6	1				
6	6	1				At Midnight
7	6	1				
8	6	1				Commenced to moderate. Made sail according and at 8 A.M. turned out all reefs and set T.G.-sail.
9	6	1				
10	6	1				
11	6	1				
12	6	1				
1	2	1	W.S.W.		4 pts	The day ends with moderate N.W. wind and pleasant weather.
2	2	1				
3	3					
4	3		N. by W.			
5	3				2 pts	Lat. by R. 47.19.
6	3					Lng. 35.00.
7	4					
8	4					
9	4		S.W. by W.			29 days out.
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 2d day of January 18 71
1	4		S.S.W.	West		
2	4		S. by W.			This day commences with moderate Westerly wind & pleasant weather.
3	4					At 4 P.M. Tacked ship, wind hauling Southerly.
4	5		N. by E.	N.N.W.		At 8 P.M. wind increased to a gale. Took in Light sails & reefed the topsails & courses.
5	5					
6	7					
7	7		N. by W.	S.W.		
8	7					
9	4	1				
10	4	1				At 1 A.M. Split Sky sail. Kept down before the wind for half an hour to secure the sail.
11	4	1			1 pt	
12	4	1				
1	4	1				The day ends with hard gales from S.W. & Squalls & rain.
2	4	1				
3	4					
4	4					Pumps well attended.
5	4					
6	4					24 Obs.
7	4	1				Lat. by R. 47.40.
8	4	1		N.W.		Lng. 37.30.
9	4	1				
10	4	1				
11	4	1				
12	4	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3rd day of January 18 71
1						
2			W.S.W.	S.W.		Heavy gales from S. W all the
3						first part of this day.
4						At 10 A.M. took in the Foresail
5						and Fore Topsail
6						At 8 P.M. wind dauling
7						to the Westward. Set Sail and took
8			S.S.W.	West		in the Starboard clue of Main Topsl.
9						Rained hard with at
10						much wind until 9 A.M. when it
11						cleared up and commenced to blow.
12						
1						Remainder of the day blowing a
2						heavy gale from S.W. with
3						terrific Squalls and high
4						Sea running.
5						
6						Pumps carefully attended.
7						
8						Lat. of D.R. 47.38.
9						Long. 37.00.
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 4th day of January 18 71
1	2		S.W.	N.W. by W.	6 Pts	
2	2					This day Commences with heavy
3	2					gale from S. Westward.
4	2					At 4 P.M. a little more
5	2	1			4 Pts	moderate. Set the Lower Topsails
6	2	1				and reefed Foresail.
7	2	1				
8	2	1				At Midnight more Ship. Wind
9	2	1	S.S.W.	West		dauling westerly.
10	2	1				
11	2	1				At 4 A.M. wind increasing
12	2	1				again. Took in the Foresail.
1	2	1	N.W. by W.			
2	2	1				The day ends with hard gale from
3	2	1				W.N.W. and high Sea running.
4	2	1				At noon more to the
5	2		N.N.W.		5 Pts	Southward.
6	2					
7	2					Pumps well attended.
8	2					
9	2					Lat. of D.R. 48.18.
10	2		North	W.N.W.		Long. 36.40.
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 5th day of January 18 71.
1	3		S.W.	S.W. Westerly	4 Pts	
2	3					This day comes in with moderate
3	3					gales from S. Westward.
4	3		W.S.W.			Made Sail as required.
5	3				2 Pts	First part of the night
6	3					Calm and cloudy.
7	3					
8	3					At Midnight got a breeze from
9			Calm			South.
10						At 4 A.M. Wind dauling to the
11						Westward and increasing.
12						Shortened Sail and at 8 A.M.
1			W.S.W.	South		took in the Fore-Topsail and lost it.
2						
3				S.S.W.		The day ends with a heavy gale
4						from S.W. by W and high Sea.
5			N.W.	W.S.W.		
6						Pumps Attended.
7					4 Pts.	
8						Lat. of D.R. 48.06.
9	1	1			6 Pts	Long. 37.10.
10	1	1				
11	1	1				
12	1	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 6th day of January 18 71
1			N.N.W.	West		
2						First part of this day heavy
3						Westerly gales & light rain.
4						
5						At 4 P.M. wind shifting to the
6						N.W and cleared up. Set Ship.
7						
8						Very heavy Squalls during
9						the night.
10						
11						Latter part of the day a little
12						more moderate. Set the Fore
1						Topsail & Reefed Foresail.
2						
3						Pumps well attended.
4						
5						Lat. of D.R. 48.04.
6						Long. 36.30.
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 7th day of January 1871
1	3		S.S.W.		8 pts	This day commences with strong westerly gale, moderating towards night.
2	3					
3	3					
4	3					
5	3					
6	3					
7	3					
8	3					At 8 P.M. Gusted out all sail and set main T.G.-gallant sail.
9	3		S.W. by S.		—	
10	3					At 4 A.M. Tacked to the Northward.
11	3					
12	3					
1	3					Remainder of the day strong westerly wind and Clear.
2	3					
3	3					
4	3					Pumps Attended.
5	3		N. by W.			
6	3					Lat. by Obs. 47.38.
7	3					Lng. 26.00.
8	3					
9	3					
10	3					
11	3					
12	3					

Mostly.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 8th day of January 1871
1	3		N.N.W.			Strong winds from West to N.W. by W. and clear weather all this day.
2	3					
3	3					
4	3					
5	3					
6	3					
7	3					At 8 A.M. Set the Fore T.G.-gallant sail.
8	3		N.N.W. ½ W.			
9	3					
10	3					
11	3					
12	3					
1	3					Pumps Attended.
2	3					
3	3					Lat. by Obs. 48.40.
4	3					Lng. 8°. 46.
5	3					
6	3					96 days out.
7	3					
8	3					
9	3					
10	3					
11	3		— " —			
12	3					

Mostly.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 9th day of January 1871
1	5		N.N.W.	W.S.W.		This day comes in with strong breze from W.S.W.
2	5					
3	5					At 4 P.M. Took in the T.G.-gallant sails.
4	5					
5	5					Middle hours: Fresh gales from S.W. and thick.
6	5					
7	5					
8	5					At midnight reef'd the topsails and furl'd the Jib and Spanker.
9	6		N.N.W.	S.W.		
10	6					
11	6					At 8 A.M. Wind increased to a heavy gale. Took in everything but the lower main T.Sail and Balance-reefed Spanker.
12	6					
1	6	/				
2	6	/				
3	6		N.W. by W.	S.W.	6 pts	Latter part of the day blowing a hard gale from W.S.W. Thick and raining.
4	6					
5	6	/				
6	6	/				Pumps well attended.
7	6	/				
8	6	/				So Os.
9	6	/				
10	6	/				Lat. by Obs. 49.10.
11	6	/	— " —	— " —		Lng. 5°. 30.
12	6	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 10th day of January 1871
1	1	/	N.N.W.	Westerly	5 pts	
2	1	/				First part of this day moderating gales from Westward.
3	1	/				
4	1	/				At 4 P.M. Took in T.Sail and made sail.
5	2	/	S.W.		3 pts	
6	2	/				At 8 P.M. Gusted out all sails and set T.G.-gallant sails.
7	2	/	W.S.W.			Wind light from N.N.W. and thick.
8	2	/			—	First part of the night-Calm.
9			Calm			At midnight hauled a pt more South. Made all sail.
10						
11						Wind increasing at sunrise.
12						Shortened sail.
1	3		W.S.W.	South		The day ends with fresh gale from S.S.W. Thick and raining.
2	4					
3	6					Furl'd under reefed topsails and Foresail.
4	6					
5	7	/				
6	7	/				Pumps attended.
7	7	/				So Os.
8	7	/				
9	8		W.N.W.	S.S.W.		Lat. by Obs. 48.40.
10	8					Lng. 4°. 22.
11	8					
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 11th day of January 18 71
1	6	/	B.b.W	S.S.W.		This day commences with fresh
2	6	/				breezes & Squally & thick.
3	6	/				At 6 P.M. Reefed & Topsails.
4	6	/				
5	6	/				Middle hours: Blowing a gale
6	6	/				South and Squally. At Midnight
7	5	/		South		furled the upper Topsails.
8	5	/	B.y.S			
9	5	/				Latter part of the day moderate and
10	5	/				thick. Bent sundry to the Foretopmast
11	5					Stay sail and Spanker.
12	5					At noon. Breeze &
1	5	/				Mid light from S.S.W. and hazy.
2	5	/				
3	5	/				So 96.
4	5	/				Lat. by R. 48.20.
5	5					Long 43.40.
6	5					
7	5		S.W	W.S.W.		
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 12th day of January 18 71
1	2	/	S.b.W	S.W.		First part of this day wind S.W.
2	2	/				and moderating.
3	2	/				At 4 P.M. Turned out all reefs.
4	2	/				Middle hours: Strong
5	2	/				gales from West with frequent
6	2	/				snow-squalls. At Midnight
7	3					furled the upper Topsails, Trysail
8	3			W.b.W		and Jib.
9	4	/				The day ends with fresh
10	4	/	S.b.y			gales from W.S.W. and Squally.
11	4	/				
12	4	/			3 pts	At noon Let out reefs & Topsails.
1	4	/				
2	3	/	S.S.W	West		Pumps well attended.
3	3	/				
4	3	/				So 96.
5	3	/				Lat. by R. 47.20.
6	3	/				Long. 43.12.
7	3	/				
8	3	/				
9	3	/	S.W.	W.b.W		
10	3	/				
11	3	/				
12	3	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 13th day of January 18 71
1	6	/	S.W	W.S.W		This day commences with fresh
2	6	/				Westerly gales and Cloudy.
3	6	/				Middle hours: Wind N.W.
4	6	/				Closing fresh
5	6	/				
6	6	/				At 4 A.M. Hove to.
7	4		S.b.W	N.W		Turned out the reefs and at
8	4					8 Set Fore-gallant sails.
9	4					
10	4					This day ends with the
11	4		W.S.W			wind fresh from N.N.W.
12	4					Cloudy and cold.
1	4					
2	4					
3	4					
4	4					
5	5			N.N.W.		Lat. by R. 46.15.
6	5					Long. 44.15.
7	6					
8	6		B.y.S			
9	6					
10	7					
11	7					
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 14th day of January 18 71
1	6		B.y.S			Throughout this twenty-four
2	6					hours strong breezes with the
3	6					N. Westward & smooth sea.
4	6					
5	6	/				Cloudy and cold.
6	6	/				
7	6	/				Pumps well attended.
8	6	/				
9	6	/				
10	6	/				
11	6	/				
12	6	/				
1	6	/	B.y.S			Lat by R. 43.47.
2	6	/				Long 41.05.
3	6	/				
4	6	/				
5	6					
6	6					
7	6					
8	6					
9	7		S.b.W			
10	7					
11	7					
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

15th day of January 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	7		SbyW	N. Westerly		
2	7					First part of this day Short N. Westerly winds & cloudy.
3	7					
4	7					
5	7					At 6 P.M. took in T.G.sail & S.
6	7					
7	7					Middle hours: Fresh
8	7					and Squally. At Midnight
9	6					reefed T.Sails, hoisted J.T.
10	6					& Mainsail.
11	6					
12	6					At 4 A.M. Fresh breeze
1	6					made sail.
2	6					The day ends with the Wind
3	6					moderate from N.N.W and
4	4					cloudy weather. All sail set.
5	4		NbyW			
6	4					So 06.
7	4					Lat/Obs. 42.00.
8	5					Lng. 48.40.
9	5		West	N.N.W		43 days out.
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

16th day of January 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	5		NbyW	N.N.W		
2	5					This day commences with Rt
3	5					wind moderate from North
4	5					and cloudy weather.
5	5					
6	6					Middle hours: Wind &
7	6		NbyW	N.N.E		same, wind hauling Easterly.
8	6					
9	6					
10	6					
11	6			N.E		Latter part of the day Light
12	6					breze from East to E.b.S
1	5	1				and Cloudy.
2	5	1				Pleasant weather and all
3	5	1		East		drawing sail set.
4	5	1				
5	5	1				So 06.
6	5	1				Lat/Obs. 42.15.
7	5	1				Lng. 51.30.
8	5	1				
9	5			E.b.S		
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

17th day of January 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4		NbyW	E.b.S		
2	4					
3	4					
4	4					All this day moderate
5	4					breezes from E.b.S to S.E
6	4					and pleasant weather.
7	5			S.E		
8	5					All drawing sail set.
9	6					
10	6					
11	6					
12	6					Lat/Obs. 42.30.
1	5	1	— " —	— " —		Lng. 54.00.
2	5	1				
3	5	1				
4	5	1				
5	5	1				
6	5	1				
7	5	1				
8	5	1				
9	5	1				
10	5	1				
11	6	1	— " —	— " —		
12	6	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

18th day of January 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		NbyW	S.E		
2	5					First part of this day light S.Easty
3	5					breze and hazy.
4	4					
5	4					Middle hours: Light pens
6	4					S.E to South and thick.
7	3	1				
8	3	1		South		At 2 A.M. Wind hauled to N.W
9	3	1				and breezed up. Took in Main Royal
10	3	1				and S.W. to sail
11	3	1				At 4 P.M. Tacked ship.
12	3	1				
1	3			S.W		Latter part of the day fresh
2	3					from N.N.W and cloudy.
3	3					
4	4		NbyE	NbyW		Saw a bark bound to the Eastward.
5	7		West	N.N.W		
6	7					Pumps attended.
7	7					So 06.
8	7					Lat/Obs. 42.30.
9	6					Lng. 56.40.
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 19th day of January 1871
1	5		West	S.S.W.		
2	5					Throughout this twenty-four hours fresh breezes from S.S.W. to South and dark cloudy weather.
3	5					
4	5					All sail set
5	5					
6	5					Pumps sounded.
7	5					
8	5					So. 46.
9	5					Lat. by D.R. 41.60.
10	5					Lng. 69.20.
11	5					
12	5					
1	5					
2	5					
3	5					
4	5					
5	5					
6	5					
7	5					
8	5					
9	6		West	S.S.W.		
10	6					
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 20th day of January 1871
1	6		N.W.½W.	S.S.E.		
2	6					This day commences with fresh breezes from N. Eastward and cloudy weather
3	6					
4	6			S.E.		
5	6					
6	6					
7	6			E.S.E.		Middle hours: Moderate from the Eastward.
8	6					
9	6					
10	6			East		Pm day ends with fine steady breze from E.S.E. and pleasant weather.
11	6					
12	6		—"—	E.S.E.		
1	5					All drawing sail set.
2	5					
3	5					Set the first reliable observation 4 day for twelve days.
4	5					
5	5					
6	5					Lat. by D.R. 42.00.
7	5					Lng. 59.46.
8	5					
9	6					
10	6					
11	6					
12	6		—"—	—"—		

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 21st day of January 1871
1	4		W.S.W.½W.	E.S.E.		
2	4					First part of this day light breze from E.S.E. and Pleasant Weather.
3	4					
4	4					Middle hours: Muckle Lame.
5	4					At 10 A.M. Set in for fog.
6	4					
7	4					Pm day ends moderate from East and thick fog.
8	4					
9	4					All drawing sail set throughout.
10	4					
11	4					
12	4					
1	4	1				
2	4	1				So. 46.
3	4	1				Lat. by D.R. 41.52.
4	4	1				Lng. 62.52.
5	4	1				
6	4	1				
7	5			East		
8	5		West			
9	5	1				
10	5	1				
11	5	1				
12	5	1				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 22d day of January 1871
1	4	1	W.½S.	E.S.E.		
2	4	1				This day commences with light breze from E.S.E and thick fog.
3	4	1				
4	4	1				At 6 P.M. mist did out and breyd up from S.S.W.
5	3		N.W.½S.	S.S.W.		Fog Cleard away.
6	3					Took in Light Sails & Trisail.
7	2					Middle hours: Fresh
8	2					gales from S. Eastward.
9	2	1				At Midnight furled upper T'gants
10	2	1				and J.T.
11	2	1				At 8 A.M. Set upper T'gants.
12	2	1				
1	2		N.W.½W.	S.W.		Latter part of the day light baffling airs all around the Compass with Snow and rain.
2	2					
3	2					
4	2					So. 46.
5	2					Lat. by D.R. 41.22.
6	2					Lng. 63.37.
7	2					
8	2					50 days out.
9			Baffling			
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 23d day of January 1871
1		Calm				This day Commences Calm. Weather cool Rig Threatning.
2						
3						
4						
5						
6	3		W. S.W.			At 5 P.M. Braced up fm S. to W. and increased to a gale. Shortened sail and at 10 hove to on the Starboard tack under Fore Clew of the Main Topsail and balance reefed Spanker.
7	3					
8						Blowing very violent gale all night with terrific Squalls of Snow and Hail and tremendous Sea running. Ship laboring heavily and shipping much water.
9						
10						At Midnight to be clew of the Main Topsail Clewing up.
11						At 4 A.M. Moderating.
12						The day ends with Heavy N.W. gales. Clear weather and cold.
1						
2						Pumps Carefully Attended.
3						Lat. fd. 40.53.
4						Lg. 68.30.
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 24th day of January 1871
1	1		W by W	N.W.	6 pts	This day Comes in with moderate gale fm N.W. At 4 P.M. Reefed main Course Main Topsail. Set Fore Topsail & reefed Foresail.
2	1					
3	1					
4	1					
5	2				3 pts	At 8 P.M. Calm.
6	2					At 10 Braced sh yards East thick and rainy.
7	2					
8			Calm			Latter part of the day, boffing fm S.E. to S.E. and fm thence to NNE at dark.
9						
10						At 2 A.M. Spoke a
11	5		W by N	East		Bremen bark fm New York bound East.
12	5					
1	5					Turned out all reefs
2	5				S E	Set Main - Top gallant sail, flying jib &c.
3	5					
4	5					At noon in the Gulf Stream.
5	5					
6	5		W by S			So 85.
7	5					Lat. fd. 40.42.
8	5					Lg. 64.42.
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 25th day of January 1871
1	3		W. & W.			
2	3					First part of this day Lighting airs from S.E. to N.E.
3	3					
4	3					
5	2					At 11 P.M. Braced sh fm N. to N.W. At 12 M. Reefed. At 4 A.M. Wind increased to a gale. Took in light sails. Reefed the Courses and after Topsails.
6	2					
7	2					
8	2					
9	2					
10	2					
11	2					
12	4		S. W.	W. & W.		At 7 A.M. Bore off.
1	4					
2	4		S. & W.			The day ends with strong N.W. gales and cloudy weather.
3	4					
4	4					
5	5		S. W.		3 pts	Pumps well attended.
6	5					
7	5					
8	5					
9	5					
10	5		W. by S.	S.W.		So 86.
11	5					Lat. fd. 41.05.
12	5					Lg. 64.46.

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 26th day of January 1871
1	3		W. by S.	S. W.	3 pts	This day Commences with strong N. Westerly gales and Cloudy.
2	3					
3	3					At 6 P.M. Wind increasing took in Mainsail and after Topsails.
4	3					
5	3	1				
6	3	1				
7	3	1				
8	3	1				At Midnight took in the Foresail Clewing down fm the Starboard with squalls of Snow, Hail and Sleet and very Cold.
9	2	1	West	Northerly	4 pts	
10	2	1				
11	2	1				
12	2	1				
1	2		W by S		5 pts	At 4 A.M. Commenced & moderate. Made sail as required.
2	2					
3	2					The day ends with moderate Northerly Wild and Cloudy.
4	2					
5	2					At noon reefed Sails and set Top gallant Sails.
6	2					
7	2					A full-rigged Brig in Company.
8	3					
9	3					Lat. fd. 40.00.
10	4					Lg. 68.30.
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

27th day of January 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		NW/W	S.S.E		
2	3					This day begins with light Southerly
3	3					and Variable to the Eastward.
4	3					
5	4			East		At 7 P.M. Wind S.E and Rainy.
6	4					Furled all fine aft Sails.
7	4					Took two first dogs of the night.
8	5			S E		At 12 A.M. Wind Variable
9	5					to the Eastward a moderating.
10	7					Furled the Gallant Sails.
11	7					Reined Head all night.
12	7					At 10 A.M. Saw a Ship.
1	7					
2	7					The day ends with fresh breezes
3	7			S S W		and Cloudy.
4	7					
5	5					This under whole to Sails
6	3					and Courses and all fine aft Sails.
7	2		N.N.W	West		
8	2					Pumps well attended.
9	2					So Cy.
10	2					Lat. by Obs. 40. 41.
11	4		W/S	N.N.W		Lg. 67. 15.
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

28th day of January 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	4		W S W			
2	4					First part of this day Wind fresh
3	4					from N. Westward & Cloudy.
4	4					
5	4					Middle hours: Wind the same
6	4					At 4 A.M. Set Gallant Sails.
7	4					
8	4					
9	3		W/S	Variable		Latter part of the day: Inclined
10	3					and Hauling Southerly.
11	3					Made Sail ship'd.
12	3					
1	3		West			Set Chains ash and last Hour.
2	3					
3	3		W/S			
4	4					Lat. by Obs. 39. 46.
5	4					Lg. 68. 57.
6	4					
7	4					
8	4					
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

29th day of January 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	1		NW/W	S.S.E		This day begins with light Southerly
2	1					& Variable Easterly.
3	3					At 6 P.M. Wind East
4	3					and freshening.
5	5			S E		At 11 P.M. Got in Reef and
6	6					commenced Snowing.
7	6					
8	6					Middle hours. Strong steady
9	9			E S E		breeze from E.S.E & Cloudy in
10	9					light Sails.
11	9					At 4 A.M. Saw Land
12	9					in this Position, fine Land
1	9					and Black Spots.
2	9					
3	9					Latter part of the day more
4	9					moderate. Stood Drawing Sail.
5	8		N.N.W			Cleared off a little at noon.
6	8					
7	7					Lat. 40. 27.
8	7					Lg 72. 50.
9	7		W/S			
10	7					57 deposit.
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from Bremen towards New York

30th day of January 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5			S E		First part of this day light East
2	5					Wind Southerly.
3	3					
4	3			S.S.E		At 1 P.M. Made Sandy Island
5	2					light-house bearing N.N.E 12 miles.
6	0					
7						At 6 P.M. Calm and at 8 Set
8						a light breeze from West.
9						Stood off and on during the night.
10						
11						At 4 A.M. Took a New York
12						Pilot on board from boat "George W
1						Blunt" No. 11.
2						
3						At noon Wind light from W.S.W
4						and pleasant weather.
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Bremen towards New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 31st day of January 18 71
1						
2						This day begins with light
3						Westerly winds & pleasant
4						weather. At 6 P.M. Set in the
5						fog and at 8 did not see Colm.
6						
7						Heard the bell on Sandy Hook
8						light-ship occasionally during
9						the night.
10						Saw large quantities of drift ice
11						
12						At 8 A.M. hauled up light from
1						L.V. and by light. The light
2						ship about a mile distant.
3						
4						At 9 took a tug boat. Hauled
5						alongside and began discharging
6						At 8 P.M. Set up to the City and made fast at
7						Robb's Stores, Brooklyn. Crew left.
8						At Quarter, Wind S.W. and rainy.
9						
10						This day contains 12 remarks for Thursday- 24
11						hours and Commences civil time
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
1			Wednesday February 1st			Southerly wind. Rain a part of
2						
3						
4			Thursday 2d			Southerly wind and light At
5						8 P.M. Entered and
6						took in to Pier 29 E.R.
7						did not get into berth until
8						night. Finished at 4 P.M.
9						
10			Friday 3d			Northerly wind & cold
11						Continued discharging in the
12						forenoon. Knocked off at 5 P.M.
1						
2						
3			Saturday 4th			Pleasant weather & cold
4						Worked all day discharging.
5						
6			Sunday 5th			Fine weather & very cold.
7						
8			Monday 6th			Wind S. W. and cold.
9						Worked all day discharging
10						Carpenter left the ship.
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal ~~from~~ Staying in ~~towards~~ New York

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Tuesday February	7th		Moderate and pleasant. Worked
2						all day discharging
3						
4						
5			Wednesday	8th		Southerly wind and rainy. So
6						Corp discharged to-day.
7						Crew on board.
8						
9			Thursday	9th		Westerly wind and pleasant.
10						Worked hard a day discharging
11						Capt. Reid went home.
12						
1			Friday	10th		Wind N.W. and pleasant
2						Worked all day discharging.
3						
4			Saturday	11th		Westerly wind and fine weather
5						Discharged Corp all day.
6						
7			Sunday	12th		Wind N.E. and cold.
8						Very snow storm to-day.
9						
10			Monday	13th		Warm and pleasant. Worked
11						all day discharging
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1			Tuesday	14th		Wind N.E. Thick snow storm
2						Finished discharging Corp at
3						11 A.M.
4						
5						
6			Wednesday	15th		Moderate and pleasant
7						Hauled out of berth &
8						made fast alongside of
9						Steamer J. Olsen,
10						Carpenter came aboard.
11						
12						
1			Thursday	16th		Moderate and fine. At 10 P.M.
2						Hauled to Pier 37 E.R.
3						Made fast alongside of a steamer
4						
5			Friday	17th		Westerly wind and pleasant
6						Commenced taking in ballast.
7						
8			Saturday	18th		Blowing a gale from South. Fine
9						towards night. Capt. arrived
10						in morning. Sent Mate in the
11						evening.
12						Took in a little ballast

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal ~~from~~ Laying in ~~towards~~ New York

day of 18

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1			Sunday February 19th			Westerly Wind & pleasant
2						
3						
4			Monday 20th			Westerly Wind warm & pleasant
5						Took in Stores, filled Water &c.
6						
7						
8			Tuesday 21st			Wind North'ly & cold.
9						Finished taking in Ballast, and
10						drawing 11.3 forward, 11.5 aft.
11						Rigged out Jibboom & C. ready
12						for sea.
1						First Mate (Mr. Hardy) Came aboard.
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1						
2						
3						
4						
5						
6						
7			Wensday Feb 22d			This day comes in with fine
8						weather with the wind by the S.S.E
9						at 10 A.M. crew came on board at 10.30 A.M.
10						Steam Tug came along side and towed
11						us to sea at 1.00 P.M. Steam Boat left us
12						made all sails and proceeded on our way
1						At 3.00 P.M. Sandy hook lighthouse bore by Comp
2						W.S.W. Dist 1-2 Miles from which I take departure
3						and this day at being 15 Hours long and end
4						civil time to commence see line
5						
6						
7						
8						
9						
10						
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from New York towards L.W. Pass & Str. pass

23d day of February 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1						This day comes in with fine
2						weather and Light baffling air
3						
4						At 8 P.M. Sandy Hook Light house
5						bore by Compass W by S Dist 8 Miles
6						
7						
8						Middle part Calm weather
9						
10						
11						
12						At 4 A.M. Highlands Lights bore
1						by Compass W by W Dist 15 Miles
2						
3						
4	1		S.E	S.E		Last part ends with fine weather
5	1					and Light baffling air
6	1					Men Barrow employed
7	1					
8	1					
9	6		W.W	S.E	3.1	This day begins with fine
10	1					weather in the morning got
11	1					under way at 8 P.M. past
12	1					Cape Cod Light Ship

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
					40.00			73.55	

24th day of February 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	1		E by S	E by E		This day comes in with fine weath
2	1					er with Light baffling air
3	2					
4	2					
5	2					
6	1					
7	1					Middle part Calm weather and
8						Cloudy sky
9						
10						At 12 Midnight Highland Lights
11						bore by Compass S.W. by W Dist 20 Ms
12						
1						
2						
3	1		S E			Last part ends with a Moderate
4	1					breze and Cloudy weather
5	1					
6	1					
7	2					
8	3					
9	6		S E by E			
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				38 25				73 4	

Journal from New York towards S. W. Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 25th day of February 1871
1	6		NE[illegible]E			This day comes in with Cloudy weather and a moderate breze
2	6					
3	6					At 4 PM. Stowed Anchor
4	6					At 6 " " Strong breze furled all light sailes And reefed the Maine Saile & furled the Same
5	6					
6	6					
7	6		E			
8	5					
9	4					
10	4					Middle part Strong gale ~~[illegible]~~ the Upp Topsailes and Fore Sail
11	4					
12	4				4 Fathoms	
1	2		SE[illegible]S			
2	2					At 4 AM more moderate Set the fore sail and Upper topsailes
3	2					
4	2					
5	2					
6	2					
7	2					At 8 AM made all saile
8	2		E			Leatter part ends with a cloudy sky and a moderate breze
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
					28 24			71.48	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 26 day of February 1871
1	6		E by S	S W		This day comes in with fine weather and a moderate breze
2	6					
3	6					
4	6					
5	6					
6	6					
7	7		S by W	S W		At 2 PM. Squally weather furled all light sails
8	7					
9	7		E by S			
10	7					Middle part squally weather
11	7					
12	7					
1	7		E by S			
2	7					Leatter part ends with fine weather and a moderate breze
3	7					At 12 M set the T. G. allant sails
4	7					
5	7					
6	7					
7	7					
8	7					
9	7	1/2				
10	7	1/2				
11	7	1/2				
12	7	1/2				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				35 57	35 24			71 19	

Journal from New York towards S. W. Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 27th day of February 1871
1	7	1/2	NE by E	S S W		This day comes in with fine weather and a moderate breze
2	7	1/2				
3	7	1/2				
4	7	1/2				
5	7	1/2				At 8 PM. strong breze furled the Top Gallant sailes
6	7	1/2				
7	7	1/2				
8	7	1/2				
9	7		SE by S			Middle part strong breze and squally weather
10	7					
11	7					
12	7					
1	7					At 9 AM. furled the Fore & Main sailes & reefed the Upper Topsailes
2	7					
3	7					
4	7					
5	7					
6	7					Leatter part ends with a strong breze & fine weather
7	7					
8	7					
9	7					
10	7					
11	7					
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				33, 51	34 11			62.24	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 28th day of February 1871
1	1		W by N	S S W	4	This day comes with a strong breze and fine weather at 1 PM wore ship to the westward and furled the upper Topsailes
2	1					
3	1					
4	1					
5	1					
6	1					At 8 P. M. wore ship to the S. E.
7	1					
8	1		E			At 10 PM squalls weather and heavy rain
9	3				2	
10	3					
11	3		S by E	S W		Middle part rainy weather and a strong breze
12	3					
1	2					
2	2					
3	2					At 8 AM. set the fore sail & reefed main Sail and upper Topsailes
4	2					
5	4					
6	4					
7	5					
8	5					
9	6		S. W.			
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				33, 31	33 24			66 55	

Journal from New York towards S W Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 1st day of March 1871
1	7		W	N W		This day comes in with fine weather and a strong breez
2	7					
3	7					
4	7					
5	7					
6	7					
7	7			North		
8	7					
9	7					
10	7					Middle part moderate weather and a heavy Sea
11	6					
12	6					
1	4			S E		
2	3					
3	3					
4	3					Latter part fine weather & able in all sail set
5	2					
6	2					
7	1					
8	1					
9	1		W S W			
10	1					
11	1					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				52.08	53.03			68 27	

H	K	F	COURSES	WINDS	LEEWAY	REMARKS. 2d day of March 1871
1	2		W S W	S S W		This day comes in with fine weather and a moderate breez
2	2					
3	1					
4	1					
5	1					
6	1					
7	2		S by W			Middle part fine weather and a moderate breez
8	2					
9	2		W			At Midnight Tacked ship to the Southward
10	2					
11	2					
12	2					
1	2		S S W	S W		Latter part ends with fine weather and a moderate breez
2	2					
3	2					
4	2		S W	S E		
5	3					
6	3					
7	3					
8	3					
9	2	1/2				
10	2	1/2				
11	2	1/2				
12	2	1/2				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				51.48	51 42			69.12	

Journal from New York towards S W Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 3d day of March 1871
1	4	1/2	S W	East		This day comes in with fine weather and a moderate breez
2	4	1/2				
3	4	1/2				
4	4	1/2				
5	4	1/2				
6	6	1/2				
7	6	1/2		S E		
8	6	1/2				Middle part fine weather
9	6	1/2				
10	5	1/2		S S E		
11	5	1/2				
12	5	1/2				
1	6	1/2				Latter part ends with fine weather and a moderate breez
2	6	1/2				
3	6	1/2				
4	6	1/2				
5	6	1/2				
6	6	1/2				
7	6	1/2				
8	6	1/2				
9	6	1/2				
10	6	1/2				
11	6	1/2				
12	6	1/2				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				30. 03	28. 55			71.08	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 4th day of March 1871
1	6	1/2	S W	S S E		This day comes in with fine weather and a moderate breez
2	6	1/2				
3	6	1/2				
4	6	1/2				
5	6	1/2				
6	6	1/2				
7	6	1/2				Middle part Moderate weather
8	6	1/2				
9	4					
10	3					
11	3					
12	3					
1	6	1/2				Latter part ends with fine weather and a strong breez
2	6	1/2				
3	6	1/2				
4	6	1/2				
5	7					
6	7					
7	7					
8	7					
9	6	1/2	W S W	S W		
10	6	1/2				
11	6	1/2				
12	6	1/2				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				29, 01	28 30			73 22	

Journal from New York towards S.W. Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 5th day of March 1871
1	7		W.S	S W		This day comes in with fine weather and a moderate breze
2	7					
3	7					
4	7					
5	7					
6	7					
7	6					
8	6					
9	6		W b S			Middle part rainy at Midnight wind hauld suddenly to the S & W
10	6					
11	6					
12	6					
1	6		S.W.b.S	S.W.		
2	6					Latter part fine weather
3	6					
4	6			N.N.E		
5	5					
6	5	11				
7	5	11				
8	5	11				
9	5	11				
10	5	11				
11	5	11				
12	5	11				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				28.7	28.09			75.14	

H	K	F	COURSES.	WINDS	LEEWAY.	REMARKS. 6th day of March 1871
1	3	12	S.W.b.S	S.E.		This day comes in with fine weather and a moderate breze
2	3	12				
3	3	12				
4	3	12				
5	3					
6	3					
7	3					
8	3					
9	2					Middle part light airs and fine weather
10	2					
11	1					
12	1					
1	2					
2	2					Latter part ends with fine weather and a moderate breze
3	2					
4	2					
5	2					
6	2					
7	6					
8	6					
9	6					
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				26.55	26.30			76.24	

Journal from New York towards S.W. Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 7th day of March 1870
1	6		S.W.	S & E		This day comes in with fine weather and a moderate breze
2	6					
3	6					
4	6					At 8 P.M. made Hole in the wall Light
5	6					
6	6					
7	6					
8	6					Middle part fine weather
9	6					
10	6					
11	6		S.W.b.W			At 4 A.M. Hole in the wall bore E b N dis 14 miles
12	6					
1	6					
2	6					At 8 A.M. Stars Cay E & S 12 miles
3	8		W b N			
4	8					
5	7					Latter part ends with fine weather & a moderate breze
6	7					
7	7					
8	7					
9	7			East		
10	7					
11	7					
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				22.02	22.11	0		58.30	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 8th day of March 1870
1	7		W.b.N			This day comes in with fine weather and a moderate breze
2	7					
3	7					
4	7					At 6 P.M. made Great Isaac light
5	7		W.b.S			
6	7					
7	7					Middle part fine weather
8	7					At Midnight Isaac light bore
9	7					by Compass N E b E Dist 15 Miles
10	8		S.W.b.S			At 10 A.M. made Gun Cay light
11	8					
12	8					At 3 P.M. Gun cay bore N b East
1	7					11 Miles
2	7					
3	7					Latter part ends with fine weather
4	7		S b E			
5	8					
6	8					
7	8					
8	8					
9	8		South			
10	8					
11	8					
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				24.40	24.53			78.55	

Journal from New York towards S.W. Pass

9th day of March 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	10		J.W.	SE		This day comes in with fine weath
2	10					and a moderate breez
3	10					At 2.30 P.M. saw Dog Rocks
4	10					At 6 P.M. made Ebon City Light
5	10					
6	10					
7	10					
8	10					
9	10					Middle part fine weather and a
10	10					moderate
11	10					
12	10					At 4 A.M. Made the Pass of Mistanjas
1	9					
2	9					
3	8		W.S.W			Latter part ends with fine weather
4	8					
5	6		West			
6	6					
7	6					
8	6					
9	4					
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				25.20	23.20			82.25	

10th day of March 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	8		West	SE		This day comes in with fine
2	8					weather and a little breez
3	8		S.W			At 2.30 P.M. made Pass bore by Compass
4	8					SE 25 miles
5	8					
6	8					
7	8		S.S.W.½W			Middle part fine weather
8	8					
9	5		W.½S.W.½W			
10	5					
11	5					
12	5					Latter part fine weather Several sails in
1	2					sight
2	2					
3	2					
4	2					
5	2					
6	2					
7	2		W.½S.W			
8	4					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
	11			23.55	23.55			85.80	

Journal from New York towards S.W. Pass

11th day of March 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		N.W.	SE		This day comes in with fine
2	6					weather and a moderate breez
3	6					
4	6					
5	6					
6	6					
7	6					
8	6					Middle part fine weather
9	6					
10	6					
11	6					
12	6					
1	5	1/2				Latter part ends with fine weather
2	5	1/2				
3	5	1/2				
4	5	1/2				
5	5					
6	5					
7	5					
8	5					
9	6					
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				25.30	25.30		84.33		

12th day of March 1870

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		NW	SE		This day comes in with fine weather
2	5					and a moderate breze
3	5					
4	5					
5	5					
6	5					
7	6		NW½W			Middle part fine weather
8	6					
9	5					
10	5					
11	5					
12	5					Latter part ends with fine weather
1	5					
2	5					
3	5					
4	5					
5	5					
6	5					
7	5					
8	4					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
					27.05			84 11	

Journal from New York towards N.W. Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 13th day of March 1870
1	4		S.W.½W.	S.E.		This day comes in with fine weather and a fair breeze
2	4					
3	4					
4	4					
5	1			West		At 3 P.M. calm and rainy
6	1					
7	1					
8	1		W.S.W.½W.			
9	1					Middle part fine weather
10	1					
11	1					
12	1					
1	Calm					
2						
3						
4						
5						
6	1			S.E.		
7	1					
8	2					
9	2					
10	2			S.E.		
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				27.47	27.51			85.20	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. 14th day of March 1870
1	1	1½	N.W.½W. & S.E.			This day comes in with fine weather and a little breeze
2	1	1½				
3	1	1½				
4	1	1½				
5	2					
6	2					
7	2					
8	8					Middle part fine weather
9	8					
10	8					
11	8					
12	8					
1	8					
2	3					Leatty part ends with fine weather
3	3					
4	3					
5	4					
6	4					
7	4					
8	4					
9	6					
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				28.40	28.42			87.4	

Journal from New York towards N.W. Pass

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 15th day of March 1870
1	6		W.S.W.	S.E.		This day comes in with fine weather and a moderate breeze
2	6					At 3 P.M. spoke the Ship J. Foster from Mobile to Liverpool
3	6					
4	6					
5	6					
6	6					At 7 P.M. made South Pass light bearing
7	8		W.S.W.			W.N.W. ½ Compass
8	8					At 7 P.M. Ind. & Str. Tamberin W.S.W. at 11.30 East sight of it bearing N.W.E.
9	8					
10	6					At Midnight fine weather
11	5					Hood of Ton all night
12	5					
1	1					At 3.30 Am got a Pilot from Schooner No 8
2	1					At 7.0 Apt. came to anchor off Pilot town in 7 fathoms of water This day comes in with fine weather
3	1					This ends at a time to comence Civil time
4	1					
5	1					
6	1					
7	4					
8	4					
9	5					
10						
11						
12						

Remarks the Least 12 Hours of 15th inst of March 1870
These 12 Hours comes in with fine weather and continues all strong breeze These 12 Hours at 3 P.M. Tow boat Lecaveathan came along side and towed us over the bar and we came to anchor off Pilot town with 16 fathoms to the water edge This day

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. 16th day of March 1870
Thursday March 16th						This day comes in with the wind S.E. At 6 P.M. Tow Boat Rochester came along side and we got under weigh with a Spanish bark and proceeded up the river At 8 P.M. wind suddenly changed to the N.W. and blew a fresh came to anchor with three fathoms of chain at 9 P.M. Moderate blowing up Anchor and proceeded on our way at 8 P.M. Began raining and thick came to anchor and set the watch These 24 hours ends with the wind N.W. and clear weather
Friday " 17th						This day comes in with fine weather and a strong breeze from the N.W. Light down the Lower Pass At 5 P.M. got under weigh This day ends with the wind N.W. and fine weather
Saturday " 18th						This day comes in with fine weather making slow progress up the river this day ends with fine weather
Sunday 19th						This day comes in with fine weather at 10 A.M. got to town made fast along side Ship Lisbon at Part 85 at Noon got made fast and cleared up decks This day ends with fine weather

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal ~~from~~ of Bark Deborah Pennell in New Orleans

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.	day of	18

Monday 20th — This day comes in with fine weather Steamers employed clearing out the hole and discharging ballast

Tuesday 21st — This day comes in with fine weather Steamers employed discharging ballast this day commenced to receive cotton

Wensday 22d — This day comes in with fine weather finished discharging ballast at noon commenced to take in cotton

Thursday 23d — This day comes in with fine weather and cool Steamers employed stowing cotton

Friday 24th — This day comes in with fine weather and a strong wind from the N.W. Steamers employed stowing cargo

Saturday 25th — This day comes in with fine weather Steamers at work in the hole

Sunday 26 — This day comes in with fine weather and continues so throughout the day

Monday 27 — This day comes in with fine weather and strong breze from the

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.	day of	18

Tuesday 28 — This day comes in with rainy weather and continues so all day Steamers at work in the hole

Wensday 29th — This day comes in with fine weather and a strong breze from the N.W. Steamers at work in the hole

Thursday 30 — This day comes in with fine weather and last Steamer at work in the hole

Friday 31 — This day comes in with fine weather and continues so all day Steamers employed in the hole

Saturday 1st April — This day comes in with fine weather and continues so all day steamers employed stowing cargo

Sunday 2d " — This day comes in with fine weather and a strong breze

Monday 3d " " — This day comes in with fine weather and continues so all day steamers employed stowing cargo

Tuesday 4th " " — This day comes in with a strong breze and fine weather Steamers employed stowing cargo

Wensday 5th " — This day comes in with fine weather and continues so all day Steamers at work in the hole

Thursday 6th " — This day comes in with fine weather and continues so all day Steamers at work in the hole

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal ~~from~~ of Bark Deborah Pennell in New Orleans

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.	day of	18

Friday April 7th — This day comes in with fine weather and continues so all day Steamers employed three quarters of a day

Saturday " 8th — This day comes in with fine weather Steamers not at work this day

Sunday 9th " — This day comes in with fine weather and continues so throughout the day

Monday 10 — This day comes in with fine weather and fresh breezes no cotton this day

Tuesday 11th " — This day comes in with fine weather and continues so all day

Wensday 12th " — This day comes in with fine weather Latter part Cloudy weather no cotton this day

Thursday 13 — This day comes in with fine and continues so all day no cotton this day

Friday 14th " — This day comes in with fine weather and continues so all day no cotton this day

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Saturday — This day comes in with fine weather and continues so all day no cotton this day

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.	day of	18

Sunday 16th — This day comes in with fine weather and continues so all day

Monday 17th " — This day comes in with fine weather and continues so all day no cotton

Tuesday 18 — This day comes in with fine weather Commenced to Bend Sails one man come on Board no Cotton this day

Wensday 19th — This day comes in with fine weather and continues so all day no cotton this day

Thursday 20th — This day comes in with fine weather and continues so all day received on board 22 Bales of Cotton Took same on board

Friday 21st — This day comes in with fine weather and continues so all day received (100) one Hundred Bales of Cotton

Saturday 22d — This day comes in with fine weather and continues so all day no cotton this day

Sunday 23d — This day comes in with fine weather and continues so all day

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from of Barque Deborah Cummins in New Orleans

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
						day of 18
Monday	24th		April			This day comes in with rainey weather and continues so through the day finished Loading Cotton on bord 2301 Bales of Cotton vessel very Crank
Tuesday	25		April			This day comes in with fine weather at 10 AM. broak up the tier at 1 P.M. Tow Boat came along side to tow us to Governments Wharf finding no ship clear came to anchor at Slaughter House Point
Wensday	26		"			This day comes in with a stong breze and clear weather at 10 A.M. Steamer Harry Bright came along side and took us to the wharf this day ends with a strong breez from the S.E
Thursday	27th					This day comes in with fine weather finished bending sails at 6 P.M. Tug Boat Wabash came along side and made us a tow at 8 P.M. started down river at 11 P.M. foggy weather came to anchor this day ends with foggy weather
Friday	28th		"			This day comenses with foggy weather at 4 AM clear weather hove up anchor and got under weigh and proceeded down the river at 1 P.M. arrived at Pilot Town anchored the rest of the tow and proceeded out over the bar and anchored in 7 fathoms of water with 80 fathoms to the water crew variously employed this day ends with fine weather and calm

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
						day of 18
Saturday	29th		"			This day comes in with fine weather at 5 AM got under weigh with the wind S.S.W very light at noon S.Dr. Pilot bore S. compass Dist. 15 Miles from which I take my Departure this ends Civil time to comense Sea time this day is 12 hours long

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
						Sunday 30 day of April 187
1	5		E.S.E	South		This day comes in with fine weather and a lite breze
2	5					
3	5					
4	5					
5	5					
6	5					
7	5					Middle part fine weather
8	5					
9	5		E.S.			
10	5					
11	5					
12	3					Latter part ends with fine weather and a moderate breze all swile set
1	3					
2	3					
3	3					
4	3		E.S.E			Pumps Attended
5	4					
6	4					
7	4					
8	4					
9	4		East	S.S.E		
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				28 38	28 33			87 15	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
						Monday day of May 187
1	4		East	S.S.E		This day comes in with fine weather and a moderate breze
2	4					
3	4					
4	4					
5	4					
6	4					
7	4					Middle part fine weather
8	4					
9	5					
10	5					
11	5					Latter part ends with fine weather and a lite breze
12	5					
1	4					
2	4					
3	4					Pumps Attended to
4	4					
5	4					
6	4					
7	4					
8	4					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				28 24				86 18	

Journal from New Orleans towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Tuesday 2nd day of May 1871
1	3		S.S.W.	S.E.		
2	3					This day comes in with fine at 1 P.M. Packet ship, to the S.W.
3	3					
4	3					
5	4					
6	4					
7	4					
8	4					Middle part fine weather at Midnight Tacked Ship to the Eastward
9	5					
10	5					
11	5					
12	5					
1	4		E.S.E			Latter part ends with fine weather
2	4					
3	4					
4	4					
5	5					Pumps Attended
6	5					
7	5					
8	5		E.N.E			
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				28, 24	28 32			85,28	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Wensday 3 day of May 1871
1	4		S.by E.½E			
2	4					This day comes in with fine weather and a moderate breeze at 1 P.M. Tacked ship to the S.W.
3	4					
4	4					
5	4					
6	4					
7	4					
8	4					
9	4					Middle part fine weather at Midnight tacked ship to the Eastward
10	4					
11	4					
12	4					
1	1		E.S.E.½E			Latter part fine with a little breeze
2	1					
3	1					
4	1					
5	1					Pumps Attended
6	3					
7	3					
8	3					
9	5		E.½S			
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				27.58	28,00			85 8	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 4 day of May 1871
1	5		S.W.½W	S.E.		
2	5					This day comes in with fine weather at 1 P.M. Packet ship, to the S.W.
3	5					
4	5					
5	5					At 8 P.M. Sharp Lightning in the S.W. at 10 P.M. wind changed to the S.E.
6	5					
7	4					
8	4					
9	4		S.by W	N.W.		Middle part raining weather and light winds
10	4					
11	4					
12	4					
1	Calm					
2						
3						
4						Latter part ends with raining weather and a moderate breeze
5	1		S.E.by E	N.E		
6	1					Pumps Attended to
7	1					
8	1					
9	4					
10	4					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				27 32				85.36	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Friday 5 day of May 1871
1	6		S.E.by S	S.W.		
2	6					This day comes in with raining weather and a moderate breeze
3	6					
4	6					
5	6					At 6 P.M. fine weather
6	6					
7	6					
8	6					Middle part fine weather
9	6					
10	6					
11	6					
12	6					Latter Part fine weather
1	6					
2	6					
3	6					Pumps Attended
4	6					
5	7					
6	7					
7	7					
8	7					
9	6					
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				25 28	25 18			84 55	

Journal from New Orleans towards Bremen

Saturday 6 day of May 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		E.E.E.	S.W.		This day comes in with fine weather and calms so all day
2	6					
3	6					
4	6					
5	6					
6	6					Middle part fine weather
7	6					
8	6					
9	6					
10	6					
11	6					
12	6					Latter part fine weather and a moderate breze
1	6					
2	6					
3	6					
4	6					
5	6					Pumps Attended to
6	6					
7	6		E by N			
8	6					
9	6					
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				24,12	24,08			82.28	

Sunday 7 day of May 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	7		E by N	S.W.		This day comes in with fine weather and a fine breze
2	7					
3	7					
4	7					
5	7					
6	7					Middle part fine
7	7					
8	7					
9	7					
10	7					
11	7		N.E.by E			Latter part ends with fine weather and a fine breze
12	7					
1	1			North		
2	1					Pumps Attended
3	1		E.S.E.			
4	1					
5	1					
6	1					
7	1					
8	1					
9	1		N.E.			
10	1					
11	1					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				24 40	24 38			82 24	

Journal from New Orleans towards Bremen

Monday 8 day of May 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	8		W.N.W.	N.N.E.		This day comes in with fine weather and a fine breze
2	8					
3	8					
4	8					At 7 P.M. made Carysford reef Light at 8 P.M. wore ship to the Eastward Carysford Light bore of Compass N.N.W. Dist 8 Miles
5	8					
6	8					
7	8					
8	8					Middle part moderate weather and baffling winds
9	8		E.S.			
10	1					
11	1					
12	1					
1	1					Latter part fine weather and a moderate breze
2	1		N.E.			
3	1					
4	1		N.W.			Pumps Attended to
5	1					
6	1					
7	2					
8	2					
9	2		North	East		
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				24 49	25. 51			78. 56	

Tuesday 9 day of May 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	5		E.S.			This day comes in with fine weather and a moderate breze At 1 P.M. Tacked ship to the Eastward
2	5					
3	5					
4	5					
5	5					
6	5					
7	5					
8	5					Middle part fine
9	5					
10	5					At 4 A.M. Tacked ship to the S.E.
11	5					
12	4					
1	1					Latter part fine weather and calm
2	1					
3	1					
4	1					
5	Calm					Pumps Attended
6						
7						
8						
9						
10						
11						
12						

Current S.W. Rate per hour

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				27,80	25 23			77 35	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Tuesday 10 day of May 1871
1	1		North	South		
2	1					This day comes in with fine
3	1					weather and a moderate breez
4	1					
5	1					
6	1					
7	3		N by W ½ W			
8	5					Middle part fine.
9	4					
10	5		N by W	S.S.W		
11	6					
12	6					
1	7					Latter part ends with fine weather
2	7					and a moderate breez
3	7					
4	8		North			
5	8					
6	8					Pumps Attended to
7	8					
8	8					
9	8					
10	8					
11	8					
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				28.27	28.28			78.26	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Thursday 11 day of May 1871
1	7		S.E. ½ E	South		
2	7					This day comes in with fine
3	8					weather and a moderate breez
4	7					from 8 to 9 P.M. to 4 A.M. Sharp lightning
5	7					in the S.W. and heavy thunder
6	7					
7	7					
8	7					
9	7					At 8 A.M. in heavy sea furled all the
10	7			S.E.		sails
11	7					
12	7					
1	7					
2	8					Latter part ends with fine weather
3	5		North			and a heavy Sea from the S.W.
4	2					
5	2			E.S.E.		
6	6		N.E. by N ½ N			Pumps Attended to
7	7					
8	7					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				32.10	32.21			77.50	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Tuesday 12 day of May 1871
1	8		N.E.	S.E.		This day comes in with fine
2	8					weather and a moderate breez
3	8					At 4 P.M. Strong Breze
4	8					At 5 P.M. furled all light Sails
5	9					
6	8					
7	8					
8	8					
9	2	½				Middle part Heavy gale and heavy sea
10	2	½				Midnight Handed the Upper Topsails maine
11	2	½				sail and reefed the fore sails heavy sea
12	2	½				vessell Laboring heavy
1	2	½				At 4 A.M. Striped ahead sea
2	2	½				At 5 A.M. Sounded 5 pumps found the Vessell
3	2	½				making some water
4	2	½				Latter part ends with a strong gale
5	5					and heavy sea
6	5					
7	5					
8	5					
9	8					
10	8					Pumps attended to
11	8					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				33.32				76.01	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 13 day of May 1871
1	1		S.E.	S.E.		This day comes in with a strong gale
2	1					and heavy sea
3	1					
4	1					
5	1					
6	1					
7	1					Middle part more moderate and heavy sea
8	1					
9	3					
10	2					
11	2					
12	2					
1	1		E.S.E. ½ E	N.E.	3 Points	Latter part ends with strong gale and
2	1					heavy sea Vessell Laboring heavy and
3	1					straining & making some water
4	1					
5	1					Pumps attended to
6	1					
7	1					
8	1					
9	1					
10	1					
11	1					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lcn.	Lon. in.	Lon. by Ob.
				34.00				75.33	

Journal from New Orleans towards Bremen

Sunday 14 day of May 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	1		E.b.N	S.S.E	2 Points	This day comes in with a strong gale and heavy sea
2	1					At 8 P.M. set 1st Reef Fore Sail
3	1					
4	1					
5	1					
6	1					
7	1					
8	1					Middle part more moderate and less sea set the Mains sail and hoisted topsails
9	2					
10	2					
11	2					
12	2		E.b.E			
1	2					
2	3					Latter part ends with a strong breeze and clear weather
3	3					
4	3					
5	4					
6	4					Pumps Attended to
7	4					
8	4					
9	4					
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				54.11				79.33	

Monday 15 day of May 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	4		E.b.N	N.N.E.		This day comes in with fine weather and a moderate breeze
2	4					At 1 P.M. set the Lee sails
3	4					
4	4					
5	4					
6	3					
7	3					
8	3					Middle part fine weather with a light airs
9	2					
10	2					
11	1					
12	1					
1	1					
2	1					Latter part ends with fine weather and a moderate breeze
3	1					
4	1		S.E.b.E	West		
5	1					Pumps Attended to
6	1					
7	1					
8	1					
9	1			S.S.W		
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				84.30	84.28			72.28	

Journal from New Orleans towards Bremen

Tuesday 16 day of May 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	7		N.E.b.N	S.W.		
2	7					This day comes in with fine weather and a fine breze
3	7					
4	7					
5	7					
6	7					
7	7					At 10 P.M. Sharp Lightning in the N.W
8	7					
9	8					
10	8					Middle part strong breeze and much Thinder and Lightning
11	8					
12	8					
1	8					
2	8					
3	7					
4	7					At 8 A.M. heavy Thinderstorm
5	7					
6	5					Latter part ends with a strong breeze and Cloudy weather
7	5		N.E	South		
8	5					
9	1					
10	4					Pumps Attended to
11	8					
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				86.38				79.31	

Wensday 17 day of May 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	8		E.b.E			
2	8					This day comes in with rainey weather and a strong breze
3	8					
4	8					
5	8					
6	8					
7	8					
8	8		E.b.N.b.N			Middle part fine weather and a strong breze
9	9					
10	9					
11	9					
12	9					
1	9					
2	8					Latter part ends with fine weather and a strong breze
3	9					
4	9					
5	9					
6	10					
7	10		E.b.N			
8	9					
9	9					
10	9					
11	9					
12	9					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				38.14				66.57	

Journal from New Orleans towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 8 day of May 1871
1	7		E & E	Var		
2	7					This day comes in with fine weather and a moderate breeze
3	7					
4	7					
5	7					
6	7					
7	7					
8	7					
9	7					Middle part fine weather and a moderate breeze
10	7					
11	7					
12	7			N W		
1	7					
2	7					
3	7					Latter part ends with rainy weather and light baffling airs
4	7					
5	4					
6	4					
7	4					Pumps Attended to
8	4			North		
9	2					
10	2					
11	Calm					
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				38.2				64.35	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Friday 19 day of May 1871
1	1		E.N.E	S.W.		
2	1					This day comes in with rainy weather
3	1					
4	1					At 10 A.M. Wore ship to the Northward
5	1		E.S.E	S.E.by.E		
6	1					
7	2					
8	2					
9	2					Midnight - strong breeze and heavy sea furled all light sails & Main Sail
10	1					
11	1		North	E.N.E		
12	1					
1	1		N.N.W.		Spirits	At 5 A.M. furled the Upper topsails
2	1					
3	1					
4	1					At 8 A.M. Wore ship to the Southward and Eastward
5	1					
6	1					
7	1					At 9 A.M. furled jib & Fore Sail
8	1		S.E.by.S	S.E.by.E		
9	1					Latter part ends with a strong gale & heavy sea
10	1					
11	1					Pumps Attended
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				39.36				64.17	

Journal from New Orleans towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 20 day of May 1871
1	9		E½E	S.E.	Spirits	
2	9					This day comes in with a strong gale and and heavy sea
3	9					
4	9					
5	9					At 10 P.M. Split the Leaver Fore Topsail
6	9					
7	9					
8	9					
9	9		E.S.E.			Middle part strong gale and raining weather a heavy sea from the S.E. Vessel making some water
10	9					
11	9					
12	9					
1	9					
2	9					At 7 P.M. more moderate bent a Leaver fore topsail in place of the one that was split
3	9		S			
4	9					
5	9					
6	9					At 10 P.M. Set the Upper Topsailes foresail Mains Sail jib & Spanker
7	9		S.E½E			
8	9					Latter part ends with a heavy sea & Variable wet weather
9	9					
10	9					
11	9					
12	5					Pumps Attended to

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				38.40	37 21			68.26	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 21 day of May 1871
1	8		N.E.by.N	E.S.E		
2	8					This day comes in with moderate weather and a heavy sea at 4 P.M. Set all sails
3	8					
4	8					
5	8					
6	8					
7	8					
8	8					
9	8	½	N.E.by.E			Middle part fine weather
10	8	½				
11	8	½				
12	8	½				
1	8					
2	8					Latter part ends with fine weather
3	8					
4	8					
5	8					
6	8		E.by.E	S.S.E		Pumps Attended
7	8					
8	8					
9	5					
10	5			S.S.W		
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				38.40	38 38			70 20	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Monday 22 day of May 1871
1	6		E by N ½ N	South		
2	6					This day comes in with fine weather and a moderate breze
3	6					
4	6					
5	6					
6	6					
7	6					
8	6					
9	6			S by W		Middle part fine weather
10	6					
11	6					
12	6					
1	6					
2	6					
3	7					
4	7					Latter part ends with fine weather and a moderate breze
5	7					
6	7			W S W		
7	7					
8	7					
9	7					
10	7					
11	7					
12	7					Pumps Attended to

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				39 48	39 38			57.57	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Tuesday 23 day of May 1871
1	7		E by N	S S W		
2	7					This day comes in with fine weather and a moderate breze
3	7					
4	7					
5	7					
6	7					
7	7					
8	7					
9	8					Middle part fine & a strong breze
10	9					
11	10					
12	10					
1	9					
2	9					
3	9					Latter part strong breze and fine weather
4	9					
5	9					
6	9					
7	10					Pumps Attended to
8	10					
9	9					
10	9					
11	9					
12	9					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				41.26	41.14			53.88	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Wensday 24 day of May 1871
1	10		E by N	S S W		
2	10					This day comes in with fine weather and a strong breze
3	10					
4	10					
5	10					
6	10					
7	10		East			
8	10					
9	10					Middle part thick weather weather
10	10					
11	10					
12	10					
1	9					
2	9					
3	9					Latter part ends with thick weather
4	9					and a strong breze
5	9					
6	9					
7	9					
8	9		E by S			Pumps Attended to
9	9					
10	9					
11	9					
12	9					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				42.47				49.01	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 25 day of May 1871
1	7		E by S	W S W		
2	7					This day comes in with thick weather and a strong breze
3	9					
4	7					
5	7					
6	7					01 - 2 P.M. Light baffling winds and rainy weather
7	1					
8	1					
9	2		E by S	S by W		Middle part fairer weather and a like wind
10	2					
11	1					
12	1					
1	3		E by S			
2	3					Latter part ends with fine weather
3	3			S by W		and a moderate breze
4	3					
5	4					
6	5					Pumps Attended to
7	10					
8	10					
9	8					
10	8			N by W		
11	8					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				43.19	42 49			46.23	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Friday 26 day of May 1871
1	7		E of S	No'th		
2	7					This day comes in with fine weather
3	7		East			and a strong breze
4	7					
5	8					
6	8					
7	10		E by S			At 7 P.M. furled all the sails
8	10					
9	7					
10	7					
11	9		E of S	N.N.E		Middle part strong breze and rainy weather
12	9					
1	7					
2	7					
3	7					
4	7					At 7 A.M. furled the Upper Topsails and Mainsail
5	7					
6	7					At 10 A.M. reefed the Foresail & Spanker and furled the fit
7	7					
8	7					
9	6					Latter part ends with a strong breze & lowry weather
10	5		E of S by S			
11	3					Pumps Attended to
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				42.21				12.47	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Saturday 27 day of May 1871
1	5		East	South		
2	5					This day comes in with a strong breze
3	6					and lowry weather.
4	8					
5	8			W.N.W		At 2 P.M. Set the fore sail & Upper Top Sails
6	8					
7	8					
8	8					
9	7					
10	7					Middle part fine weather and a
11	7			West		Moderate breze
12	6					
1	7					
2	7					
3	7			S W		Latter part ends with Cloudy weather
4	7					and a strong breze
5	9					
6	7					
7	9					Pumps Attended to
8	9					
9	9	1/2				
10	9	1/2		S.S.W		
11	9	1/2				
12	9	1/2				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lcn.	Lon. in.	Lon. by Ob
				42.80	7			88.51	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 28 day of May 1871
1	9		E by N	S.W.		
2	8					This day comes in with a strong breze
3	8					and lowry weather
4	8					
5	8					At 4 P.M. Split Fore Topgallant Sails
6	8					
7	8					At 5 P.M. furled all the sails
8	8					
9	8					Middle part more Moderate with
10	8					thick weather
11	8					
12	8					At 6 A.M. bent a fore Topsail
1	8					
2	8					Latter part ends with thick weather
3	8					and a strong breze
4	6					
5	8					
6	8		E by S			Pumps Attended to
7	8					
8	8					
9	9					
10	9					
11	9					
12	9					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				45.49				84.36	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Monday 29 day of May 1871
1	9		E by S	S.W.		
2	9					This day comes in with thick weather and
3	9					a strong breze at 1 P.M. Set all light sails
4	9					
5	9					
6	9					
7	9					
8	9					Middle part Strong breze and lowry
9	8					weather
10	9					
11	8					
12	8					
1	8					
2	8					Latter part fine weather and a lite
3	8					breze
4	8					
5	8					
6	6			N.W.		Pumps Attended to
7	5					
8	5					
9	3					
10	2					
11	2					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lcn.	Lon. in.	Lon. by Ob.
				46.89	46.74			130.82	

Journal from New Orleans towards Bremen

Thursday 30 day of May 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	2		SE½E	N.½E		
2	2					This day comes in with cloudy weather and a little breez
3	2					
4	2					
5	1					
6	1					At 8 P.M. tacked ship to the N.E
7	1					
8	1					
9	2					
10	2		E½N½N	S½E		Middle part fine weather and a little breez
11	2					
12	3					
1	4					
2	4					
3	4					
4	4					Latter part ends with fine weather and a moderate breez
5	5					
6	5		E½N	S.E		
7	5					
8	5					Pumps Attended to
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				47. 04	47. 48			28. 21	

Wenday 31 day of May 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	5		E½N	S.E		
2	5					Thisday comes in with fine weather and a moderate breeze
3	5					
4	5					
5	5					
6	5					
7	4		E½S			
8	4	1/2				
9	4	1/2				Middle part fine moderate weather
10	4	1/2	E.S.E			
11	4	1/2				
12	4	1/2				
1	4	1/2				
2	4	1/2				
3	4	1/2	ESE½S			Latter part ends with fine weather and a moderate breez
4	4	1/2				
5	4	1/2				
6	4	1/2				
7	4	1/2				
8	4	1/2				Pumps Attended to
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				47 45	217,53			28.55	

Journal from New Orleans towards Bremen

Thursday 1 day of June 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	4	1/2	E.S	S.S.E		
2	4	1/2				This day comes in with fine weather after a moderate breez
3	4	1/2				
4	4	1/2				
5	4					
6	4					
7	3					
8	3					
9	3					
10	3					Middle part fine weather
11	3					
12	3					
1	3		E½N	S.E		
2	3					
3	3					Latter part ends with fine weather
4	3					Several sail in sight
5	3					
6	3		ESE½S			
7	3					
8	3					Pumps Attended to
9	3					
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				48. 41	48.58			24.55	

Thsday 2 day of June 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	6		E½N	S.S.E		
2	5					This day comes in with fine weather and a little breez
3	5					
4	5					
5	5					
6	4					
7	4					
8	3					
9	3		E½S½S			Middle part fine weather and a moderate breez
10	3					
11	3					
12	3					
1	3		E½S			
2	3					Latter part ends with cloudy weather and a little breez
3	3					
4	3					
5	5					
6	5					
7	5					Pumps Attended
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				49.30				23.5	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 3 day of June 1871
1	3		E ½	SE ½ S		
2	3					This day comes in with moderate weather and a smooth sea
3	3					
4	3					
5	3					
6	6					
7	3					
8	3					
9	2					
10	2					Middle part fine weather and a light
11	2					
12	2					
1	2					
2	2					
3	2					
4	2					
5	2					Latter part and with fine weather
6	1					Several sails in sight
7	1		E by E	S E		
8	1					
9	1					Pumps Attended to
10	1					
11	1					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				50 15	50 [illegible]			21, 48	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Sunday 4 day of June 1871
1	3		NE ½ E	E S E		
2	3					This day comes in with fine weather and a light breze
3	3					
4	3					
5	3					
6	3					At 4 P.M. Spoke the Ship Messanger bound from Charleston to Liverpool
7	2					
8	2					
9	2		E by E			Middle part fine weather and a little air
10	1					
11	1					
12	1					
1	1					
2	1					Middle part fine weather and a little air
3	1					
4	1					
5	1					
6	1					
7	1					Pumps Attended to
8	1					
9	2		NE ½ E			
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				51, 05	51 03			20, 43	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Monday 5 day of June 1871
1	2		S.S.W	E by E		
2	2					This day comes in with fine weather and a light air
3	2					
4	2					
5	2		N.E. by E			At 4 P.M. Tacked ship to the Southward
6	2					
7	2					
8	2					
9	1					
10	1					Middle part calm
11	1					
12	1					
1	Calm					
2						
3						Latter part fine weather and a light air
4						
5						
6	1		N by E			
7	1					
8	1					Pumps Attended to
9	1					
10	1					
11	1					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
	[illegible]			51. 07				20. 28	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Tuesday 6 day of June 1871
1	2		S.W.	S.S.E		
2	2					This day comes in with fine weather and a light breze
3	2					
4	2					
5	2					
6	1		E.N.E			
7	1					
8	1					
9	1					
10	1					Middle part fine and calm weather
11	Calm					
12						
1						
2						
3	1		E.S.E			
4	1					Latter part fine with a light breze
5	2					
6	2					
7	2					
8	2					Pumps Attended to
9	2					
10	2		S.E ½ E	S.S.W		
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
	[illegible]			51. 5			20. 03		

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Wensday 7 day of June 187
1	2		J E by E	S.S.W.		
2	2					This day comes in with fine wea thes and a lite breze
3	2					
4	2					
5	2					
6	1					
7	1					
8	1					
9	Calm					Middle part fine with calms
10						
11						
12						
1						
2						
3						
4	1					Latter part ends with fine weather and a lite air
5	1					
6	1					
7	2					Pumps Attended to
8	2					
9	1					
10	1					
11	1					
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				51.05				9.24	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Thursday 8 day of June 187
1	2		S E by E	S.S.W.		
2	2					This day comes in with fine weather and a lite air
3	2					
4	2					
5	2					
6	2					
7	2					
8	2					
9	2					Middle part fine with a lite air
10	2					
11	2					
12	2					
1	4					
2	4					
3	4					Latter part ends with fine mod erate weather
4	4					
5	21					
6	4					Pumps Attended to
7	4					
8	4					
9	3	1/2				
10	3	1/2				
11	3	1/2				
12	3	1/2				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				51.10	51.57			16.91	

Journal from New Orleans towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Friday 9 day of June 187
1	5		J E	S.S.W.		
2	5					This day comes in with fine weather and a moderate breze
3	5					
4	5					
5	5					
6	5					
7	5					
8	5					
9	8		E by S.			
10	8					Middle part fine weather and a lite air
11	8					
12	8					
1	7		E by E			
2	7					At 4 P.M. Spoke Ship City of Brooklyn bound from Mobile to Liverpool
3	7					
4	7					
5	7					
6	7					Latter part fine weather and a lite air
7	7					
8	6					
9	5		S E			
10	5					Pumps Attended to
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				51.7	50 58			15.57	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 10 day of June 187
1	5		S E	S.S.W.		
2	5					This day comes in with fine weather and a moderate breze
3	5					
4	5					
5	5					
6	5					At 10 P.M. Strong breze parbeseall lite sails
7	5					
8	5					
9	5					
10	5		S by E	South		Middle part strong breze and cloudy weather
11	5					
12	5					
1	5		E.S.E	S.S.E		
2	5					Latter part fine weather and a strong breze
3	5					
4	5					
5	5					
6	5					Pumps Attended to
7	5					
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				51.05	51.04			11.04	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 11 day of June 1871
1	5		ESE	SE		This day comes in with fine weather and a moderate breze
2	5					
3	5					
4	5					
5	5		S.S.W			At 4 P.M. Tacked to the S.S.W
6	5					At 8 P.M. furled the Top Gallant Sails
7	5					
8	5					
9	5		SSW			Middle part signy weather and a strong breze with a heavy sea
10	5					
11	5					
12	5					
1	5					
2	5					At 4 A.M. Split the Upper Fore Topsail Sail and the
3	5					
4	5					
5	5					At 10 Let the Top Gallant Sails
6	5		SW.S.W			
7	5					Latter part ends with cloudy weather and a Lt breze
8	5					
9	5					
10	5					
11	5					Pumps Attended to
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				50.17	1.22			112.7	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Monday 12 day of June 1871
1	Calm					This day comes in with fine weather and calm
2						
3						
4						
5						
6						
7						
8						W Clarke Boatswains mate
9						
10	1		S.E.f.S	S.W		Middle part lite baffling airs
11	1					
12	1					
1	1					
2	1					
3	1					
4	1					
5	1					
6	1					
7	1					Latter part ends with fine weather and a Loosing breze
8	1		SEfE	SE		
9	1					Pumps Attended to
10	6					
11	6					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				50.2[illegible]	51 5[illegible]			10.44	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Tuesday 13 day of June 1871
1	6		ESE	South		This day comes in with a strong breze at 8 P.M. furled all light sails
2	6					
3	6					
4	4					
5	4		S.S.W		3 Points	At 4 P.M. furled the Upper Topsails Mains & fore sails Jib & Spanker and wore ship to the S.W.
6	2					
7	2					
8	2					
9	1					
10	1					
11	1					
12	8					
1	8		SEfSfS	S.S.W	½ Points	Middle part More Moderate wore Ship at Midnight to the Eastward Let the Upper Topsails & Fore Sails & Jib
2	8					
3	8					
4	8					
5	8					
6	8					
7	8					
8	8					Latter part ends with a strong breze & heavy sea
9	8					
10	8					
11	8					Pumps Attended to
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				50.30	5024.			9.51	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Wensday 14 day of June 1871
1	8		SEfS	SW	1½ Points	This day comes in with fine weather and strong breze
2	8					
3	8					
4	8					
5	8					At 4 P.M. reefed the Upper Fore Topsail and Main Sail
6	8					
7	8					
8	8					
9	8					Middle part Strong gale & heavy sea
10	8					
11	8					At 8 P.M. reefed out the the Fore Topsail and Main Sail
12	8					
1	8					
2	8					Latter part ends with a strong breze and clear weather
3	8					
4	8					
5	8					Pumps Attended to
6	8					
7	8					
8	8					
9	8					
10	8					
11	8					
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				50 18	50.7			7.06	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 5 day of June 1851
1	5		West	SSW		
2	5					This day comes in with fine weather and a Moderate breze
3	5					
4	5					At 1 P.M. Tacked to the SW
5	5					At 8 P.M. Tacked to Eastward
6	5					
7	5					
8	5					
9	5		SE			Middle part fine weather
10	5					
11	5					
12	5					
1	5					
2	5					
3	5					At 4 A.M. Tacked to the SW
4	5					At 10 A.M. made Bishops light house bearing SE & E
5	5					
6	5					Latter part ends with fine weather and a moderate breze
7	5		SW.	SSE		
8	5					
9	5					
10	5					Pumps Attended to
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				41.48	41.48			6.44	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Friday 6 day of June 1851
1	4		SW.	SSE.		
2	4					This day comes in with fine weather
3	4					
4	4					At 7 P.M. Tacked ship to the Eastward
5	4					At 11 P.M. made Scilly Light bearing SE
6	4					Middle part fine weather
7	4					
8	4		East			
9	4					
10	4					
11	4					
12	4					
1	3					
2	3					
3	3					Latter part ends with fine weather and a lite breze Spoke several Falmouth pilot Boats
4	3					
5	3					
6	3					
7	3					
8	3					
9	3		East			
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				48.40				5.56	

Journal from New Orleans towards Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 7 day of June 1851
1	2		EN	SSE		
2	2					This day comes in with fine weather and a lite breze
3	2					
4	2					
5	2					
6	2					At 2 P.M. made Lizzard Point
7	2					
8	2					
9	2		ENE	SSE		
10	2					Middle part fine weather and a lite breze
11	2					
12	2					
1	3					
2	3					
3	3		East			At 3.30 P.M. Lizzard light house compass SSE Distance 7 ms
4	3					
5	3			South		
6	3					Latter part fine weather and a lite breze
7	3					
8	3					
9	1					Pumps Attended to
10	1					
11	1			WSW		
12	1					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
	-			49.54				8.52	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 8 day of June 1851
1	7		East	West		
2	7					This day comes in with fine weather and a lite breze
3	7					
4	7					
5	7					
6	7					At 8 P.M. made Portland lite bearing NE by compass
7	7					
8	7					
9	7					At 11 P.M. Portland lite bore N.E. by E. 1/2 E.
10	7					Middle part fine weather
11	7					
12	7					At 2 A.M. Thick weather
1	7		E by South			
2	7					At 10 made Beachy head
3	7					
4	7					
5	7			W		Latter part ends with fine weather and a moderate breze
6	7					
7	7					
8	7					
9	7					Pumps Attended to
10	7					
11	7					
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				30.58				40.18 East	

Journal from New Orleans towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Monday 19 day of June 1871
1	4		E by N	S by W		
2	4					This day comes in with fine weather and a Moderate breze
3	4					
4	4					At 2 P.M. made South foreland
5	5					
6	5					At Midnight South foreland bore by compass S.E.by E. Dist 2 Miles
7	5					
8	5					
9	4					Middle part fine weather and moderate breze
10	4					
11	4					
12	4					
1	8					
2	8					
3	8					At 2.30 A.M. made Goodwin Sands the Ship bearing S.E.
4	8					
5	8					At 4 A.M. Goodwin Light-Ship fore by Compass North
6	5		E by E			
7	5					
8	7					
9	8					
10	8					Latter part fine weather and a fine breze
11	8					
12	9					Pumps Attended to

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
					51,23			1.306	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Tuesday 20 day of June 1871
1	7		S by E E	S W		
2	7					This day comes in with fine weather and a moderate breze
3	7					
4	7					
5	7					
6	7					
7	7					
8	7					
9	7					Middle part fine weather and a fine breze
10	7					
11	7					
12	7					
1	7					
2	7					
3	7					
4	8					Latter part ends with fine weather and a like breze
5	8					
6	8					
7	8					
8	8					Pumps Attended to
9	8					
10	8					
11	7					
12	6					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				53.00	53.4			1 [illegible]	

Journal from New Orleans towards Bremen.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Wensday 21 day of June 1871
1	6		S by E	S W		
2	6					This day comes in with fine weather and a moderate breze all sail set
3	6					
4	6					
5	6					
6	6					At 10 P.M. made Skelling Light
7	6					
8	6			S S W		
9	6					
10	6					Middle part fine weather and a moderate breze
11	6					
12	6					
1	5	1h		S W		
2	5	1h				
3	5	1h	S by E E			Latter part ends with fine weather
4	5	1h				
5	6					
6	6			West		
7	6					
8	7		E by E			Pumps Attended to
9	7					
10	7					
11	8					
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				6.40				5-4.10	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 22 day of June 1871
1	7		E by N			
2	7					This day comes in with fine weather and a moderate breze
3	7					
4	7					
5	7					
6	7					
7	7		N by E			At 6 P.M. Pilot came on board and Squared the vessell sharp on the wind Steer off Shore at 7 P.M. made Helgo Land bearing S.E. by E
8	7					
9	7					
10	7					
11	7		W.S.W			At 10 P.M. wore ship to the S.W.
12	7					
1	4					
2	4					Middle part fine weather and a moderate breze
3	4		E by N			
4	4					At 2 A.M. kept away for the River Weser
5	6					
6	6					
7	6					At 4 A.M. came to anchor off the town of Bremerhaven and furled the sails this day ends with fine weather and a moderate breze
8	6					
9	6					
10	6					
11	6					This ends Sea time to commence Civil time
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from of Barque Deborah to Bunnell in Bremerhaven

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
June 22		4th				This day comes in with fine weather and a strong breeze rigged in Jib Boom and got ready for Docking, this day is 12 hours and 5 minutes 6 bells time
June 23d						This day comes in with fine weather At 1 PM Tow Boat came along side and made fast Pilot came on board and docked us in the old Dock two of the crew deserted this day ends with rainy weather
June 24		4th				This day comes in with rainy weather at 10 A.M. Surveyor came on board and surveyed the Hatches crew variously employed this day ends with fine weather am
June 25		4th				This day comes in with fine weather and continues so all day one man deserted
June 26		4th				This day comes in with rainy weather an continues so all day Discharged 18 Bales of cotton
June 27		4th				This day comes in with raining weather and continues so all day
June 28		4th				This day comes in with raining weather at 10 AM Hauled Ship As charged 96 Bales of Cotton

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. day of 18
						Edgar Reed & Sons

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Journal from of D. Bunnell in towards Bremerhaven

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
July 10		4th				This day comes in with fine weather with a strong breeze Discharging cargo this day
July 11		4th				This day comes in with fine weather and discharged no cargo this day
July 12		4th				This day comes in with fine weather finished discharging this day
July 13		4th				This day comes in with rainy weather and continues so all day
July 14		4th				This day comes in with fine weather employed taking in Ballast received 71 Tons
July 15		4th				This day comes in with fine weather employed taking in Ballast received 28 Tons
July 16		4th				This day comes in with fine weather and continues so all day
July 17		4th				This day comes in with fine weather and a little breeze from the S.W. finished taking in ballast the draught of the vessel is 11 feet 4 inches aft 11 feet forward
July 18		4th				This day comes in with fine weather and continues so all day
July 19		4th				This day comes in with fine at 6 P.M. Dock Pilot came on board and handed us to the dock gates and made us fast outside of another vessel
July 20		4th				This day comes in with fine weather and a strong gale from the N.W. and below the same
July 21		1st				This day comes in with fine weather and continues so all day
July 22		4th				This day comes in with fine weather and continues so throughout the day employed getting ready for sea
July 23		d				This day comes in with fine weather and the with a S.W. & E. Alb. crew came on board rigged out fish boom at 4 PM Pilot came on board and we handed to the Dock gates steam tug took us in tow and towed us into the river where We came to anchor with 30 fathoms to the water This day ends with fine weather

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from of Bark D Lemell towards in Bremen

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
						July 24th
1	1		This day comes in with fine weather and			
2			under welch and proceeden down the river at 5.30 A.M. the wind Variable			
3			to the S.W. came to anchor with 30 fathoms of chain and furled the sails			
4			at 10 A.M. heavy squalls paid out 45 fathoms to the water vessell commenced			
5			to drag let go the other anchor with 15 fathoms of chain Latter part			
6			more moderate hove up one anchor and set the sails This day ends			
7			with a strong breze from the Westward			
8						July 25th
9			This day comes in with a strong breze from the S.W. and continues			
10			so all day with heavy squally at 2 P.M. hove up anchor and shifted			
11			berths to a more secure anchorage This day ends with the wind S.W.			
12						
						July 26th
1			This day come in with fine weather and a strong breze from the S.W.			
2			at 8 P.M. heavy squalls from the Westward at 7 P.M. heavy squalls			
3			vessell commenced to drag Let go the Second anchor with 15 fathoms			
4			of chain to the water This day ends with a strong breze			
5						
6						July 27th
7			This day comes in with fine weather and a moderate breze from			
8			the W.S.W. hove up the starboard anchor at 10 A.M. heavy squalls			
9			from the Westward			
10						July 28th
11			This day comes in with fine weather and the wind S.W.			
12			at 8 P.M. got under weigh and proceeded to sea at 10.40 A.M. passed			
			the lightship at 12 discharged the Pilot - this day ends with fine			
			weather and is 12 Hours long and ends civil time to commence sea time			

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Saturday 29 day of July 1871
1	2		N.W.b.W. & W. S.E.			
2	2					This day comes in with fine weather
3	2					and a moderate breze
4	2					
5	2					At 1.30 P.M. Heligoland bore by boussole
6	2					E.N.E. Dist. 4 miles
7	2					
8	1					
9	1					Middle part - rainy weather and
10	1					a moderate breze
11	1					
12	1		N.N.E.	W.N.W.		
1	1					
2	1					
3	1		N.E. by N.			
4	1					Latter part fine weather and a moderate
5	E					breze At sail set
6	E					
7	E					Pumps Attended to
8	E					
9	E		N.W.			
10	E					
11	E					
12	E					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
					53.00	54.53'		8.52	

Journal from Bremerhaven towards Sunderland

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 30 day of July 1871
	7		N.N.E. & N.E.	S.W.		
1	7					This day comes in with fine weather
2	7					and moderate breze
3	7					
4	7					
5	7		N.N.E.	W.S.W.		
6	7					
7	5					
8	5		N.E.	Variable		
9	8					
10	8					Middle part Squally weather furled sails
11	7			S.E.		light sails
12	7					
1	5					
2	5					
3	5					Latter part fine weather and strong
4	5					breze
5	7		N.N.E. & N.N.W.	S.W.		
6	7					
7	7					Pumps Attended to
8	7					
9	7					
10	7					
11	7					
12	7					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				55.32	55.46			2.22	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Monday 31 day of July 1871
	4		E.S.E.	S.W.		
1	4					This day comes in with moderate
2	4					weather at 1 P.M. tacked ship to
3	4					the Southward at 4 tacked to the Westward
4	1					
5	1		N.N.E.	S.S.E.		
6	1					
7	1					
8	1					
9						Middle part fine weather
10	8		West -	N.W.		
11	8					
12	8					
1	7					
2	E					Latter part ends with fine
3	E					weather and a fine breze
4	E					
5	7					
6	E					Pumps Attended to
7	E					
8	E					
9	5					
10	5			N.W.		
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				55.E	55.4			1.46	

Journal from Bremerhaven towards Sunderland

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Tuesday 1 day of August 1871
1	8		W.N.W	W.N.W		
2	8		"	"		This day comes in with fine weather and a little breeze
3	8					
4	8					
5	8					
6	8					
7	8					
8	8					
9	8					
10	8		W.S.W	S.W		Middle part fine weather at 2 A.M. caught with tides at 2.30 tacked ship & stood Northward
11	8					
12	8					
1	8					
2	8					
3	8		N.N.W	W.S.W		At 4 A.M. got a tow boat at 8 A.M. got pilot at 9.30 A.M. came to anchor in Sunderland bay this day ends with fine weather and calm seas time to commence civil time
4	8					
5	8					
6	8					
7	8					
8	8					
9	2					
10			This 12 hours comes in with fine weather and continues			
11			so all day at 2 P.M. hove up anchor and came into dock			
12			made fast			

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
			Wensday 2d			This day comes in with fine weather last night crew all deserted except one man at 8 P.M. hauled in under the Ballast crain and commenced to discharge ballast worked till 8 P.M. and knocked off this day ends with fine weather
			Thursday 3d			This day ends with fine weather and continues so throughout the day employed discharging Ballast at 3 P.M. finished discharging Ballast and received on board 145 Iron rails
			Friday 4th			This day comes in with fine weather at 6 A.M. hauled ship to the South Dock and moored ship in berth for loading Iron & Laborers employed 210 Iron rails
			Saturday 5			This day comes in with fine weather and continues so all day received 250 Iron rails
			Sunday 6th			This day comes in with fine weather and continues so throughout the day
			Monday 7th			This day comes in with fine weather and continues so throughout the day received on board 450 Iron rails
			Tuesday 8th			This day comes in with fine weather and continues so throughout the days received 478 Iron rails

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from of Barque D. Pennell towards in Sunderland

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
			Wensday	8th		This day comes in with fine weather and and continues so through the day received 541 Iron rails man came on board
			Thursday	10th		This day comes in with fine weather and continues so through the day received 432 Iron rails one man came on board
			Friday	11th		This day comes in with fine weather and continues so through the day received 565 Iron rails one man came on bord
			Saturday	12		This day comes in with fine weather and continues so through the day finished stowing the hole at 2 P.M. and secured it received 581 Iron rails
			Sunday	13th		This day comes in with fine weather and continues so all days
			Monday	14th		This day comes in with fine weather and continues so through the day received 554 Iron rails
			Tuesday	15th		This day comes in with fine weather and continues
						through the day received 254 Iron rails

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
			Wensday	16		This day comes in with fine weather received 44 Iron rails
			Thursday	17th		This day comes in with fine weather and continues so through the day no cargo this day
			Friday	18		This day comes in with fine weather and continues so through the day no cargo this day
			Saturday	19		This day comes in with fine weather received 378 Iron rails This day ends with fine weather
			Sunday	20		This day comes in with fine weather and a strong breze from the S.E. latter part ends with fine weather
			Monday	21		This day comes in with fine weather received on board 225 Iron rails finished loading at 4 P.M. rigged out the jib boom and got ready for sea the vessell Drawing 18.6 aft 18.6 forward
			Tuesday	22		This day comes in with fine weather and continues so through the day employed securing cargo
			Wensday	23d		This day comes in with fine weather at 6 A.M. crew came on board and we stood out of dock with the assistance of the steamer Beaufort and proceeded to sea this day ends with fine weather and is 12 hours long and ends civil time to commence on the

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Sunderland towards Baltimore

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 24 day of August 1871
1	6		ESE	SSW		
2	6					This day comes in with fine weather
3	8		NNE			and a strong breez
4	8					
5	9					
6	9					
7	9					
8	8					Middle part fine weather
9	8					
10	9					
11	9					
12	8					
1	9					Latter part fine weather and a strong
2	9					breez
3	9					
4	9					
5	8					
6	8					Pumps Attended regularly
7	9					
8	9					
9	9		NNE	South		B
10	9					
11	9					Lou Carruthers
12	9					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				57.35	57.80			10.59 West	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Friday 25 day of August 1871
1	9		NNE	South		
2	9					This day comes in with Strong
3	9					Breezes and Cloudy weather
4	9					
5	9					At 5 P M Hoved all legs[illegible]
6	9			SSE		Sails
7	8					wind blowing heavy at 6 P M
8	8					took in upper Topsails and
9	8					Mainsail at 7 Split the Foresail
10	8					At 7.30 Hoved all Sails except
11	8					Lower Main Topsail for a Point
12	8			SSW		Hapsail wind blowing a gail
1	8			West		from SSE to SSW vessel Rolling
2	9	/	-		8 Points	heavy
3	/	/				At Midnight wind Hauls to NW/West and
4	/	/				hove to Heading to the Southward
5	/	/				Set the Reefed Spankey
6	/	/			This day Ends	with heavy Gails Ship Labouring and
7	/	/			Stormy and	Shipping Large quantitys of water
8	/	/				
9	/	/				
10	/	/				Pumps were Attended Ship Making
11	/	/				Water
12	/	/				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				55.00				0.43 West	

Journal from towards

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 26 day of August 1871
1	1	12	SSW	SW	7 Points	
2	1	12				This day comes in with heavy
3	1	12				weather and a strong gale & head sea
4	1	12				vessel Rooling and labouring heavy
5	1	12				
6	1	12				At 7.30 P M. Moderate set the Topsails and wore
7	1	12				ship to the Northward
8	2					
9	2		NNE	WNW		Middle part more moderate
10	2					
11	2		NNW			
12	2					
1	2					At 4 AM set the Topgallant Sails
2	2					at 8 AM. Sent a reef Fore sail
3	2					
4	2					
5	3		NE			Latter part ends with fine weather all
6	3					sail set
7	3					
8	3					Pumps Attended to
9	4		North			
10	4					
11	4					
12	4					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
[illegible]	[illegible]			58.00	58 11			1.00 West	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Sunday 27 day of August 1870
1	5		NNE	SW		
2	5					This day comes in with fine weather
3	5					and a moderate breez
4	5		NE by N	NNW		
5	5					
6	5					At 4 P M set all Lt sails
7	5		NNW WbW NW by E			
8	5					At 6 P M. Packed to the westward
9	5					
10	5					Middle part fine weather
11	5					
12	5					
1	5		WSW	NW		
2	5					
3	5					Latter part ends with fine weather
4	5					and a moderate breez
5	5	12				
6	5	12				
7	5	12				
8	5	12	SW by W			Pumps Attended to
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				58.18	58.2			2.22	

Journal from Sunderland towards Baltimore

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Monday 28 day of August 1871
1	5					
2	5		SW by W	W by W		This day comes in with fine weather
3	5					At noon tacked Ship to the Northward
4	5					
5	5		W by N	West		
6	5					At 10.30 made Lundurgh head bearing
7	6					
8	5					Middle part regularly weather
9	4					At 2. Am tacked to the S.W.
10	4					
11	4					
12	4					
1	4					
2	4					
3	4		S.W.	W by N		At 5 AM. made Fayre Island bearing SW
4	4					found that we could not weather it & kept away
5	4					and went to the Southward
6	5					
7	5					Latter part ends with fine weather
8	5					
9	3		SW by S	W by N		Pumps Attended regularly
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				59:14				1=58	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Tuesday 29 day of August 1871
1	5		WSW	W by N		
2	5					This day comes in with fine weather at noon
3	5					Tacked ship to the northward
4	5					
5	5					
6	5					
7	5					At 5 P.M. made Fair Island bearing S.E.
8	5		NW by N	SW by S		by Compass
9	5					
10	5					Middle part fine weather
11	5					
12	5					
1	5					
2	5					
3	5		N.W. by W	South		Latter part ends with fine weather
4	5					and a moderate breeze
5	5					
6	5					
7	5					Pumps Attended to regularly
8	5		NW by W by W	S E		
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				59 44	59 44			4.40	

Journal from Sunderland towards Baltimore

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Wensday 30 day of August 1871
1	5		WNW	S.E.		
2	5					This day comes in with fine weather
3	5					and a moderate breeze
4	5					
5	6		WSW			D. Bound
6	6			South		
7	4					
8	3					
9	3					Middle part fine weather with a heavy
10	3					sea from the Westward
11	4		WNW	SW		
12	4					D Boundaries
1	4					
2	4					
3	4		WSW	SSW		Latter part fine weather heavy sea from
4	4					the westward
5	5					
6	5					
7	6					Pumps regularly attended
8	5					
9	5					D
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				59.30	59.32			8. 12	

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Thursday 31 day of August 1871
1	3		WNW	SSW		
2	3					This day comes in with fine weather
3	3					and a heavy sea from the westward
4	3		WSW			
5	2					At 3 P.M. Strong breeze furled all light
6	3					sails
7	3					
8	3					Middle part fine weather
9	2					
10	2					At 6 P.M. set all sail
11	2					
12	2					Latter part fine weather and a heavy
1	2					sea
2	2					
3	2					Pumps Attended to
4	2					
5	2					
6	2					
7	2					
8	2		NNW	SW		
9	2					
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				59.18	59.20			10.08	

Journal from Sunderland towards Baltimore

Friday 1 day of September 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	2		W.S.W.	W.S.W.		
2	2					This day comes in with fine weather and a heavy sea from the Westward
3	2					
4	2					
5	2					
6	2		W.b.N.	W.S.W.		
7	2					
8	2					
9	2					Middle part fine weather
10	2					
11	2					
12	2					
1	3					At 4 PM. squally weather
2	3					
3	3					
4	3					
5	3					Latter part ends with fine weather and a heavy sea
6	3					
7	3					
8	3	1/2				
9	3	1/2	W.N.W.	S.W.b.W.		Pumps Attended to regularly
10	3	1/2				
11	3	1/2				
12	3	1/2				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				58.54	58.01			12.16	

Saturday 2 day of September 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	3		N.W.	W.N.W.		
2	3					This day comes in with fine weather and a moderate breeze
3	3		S.W.b.S.			
4	3					At 3 PM tacked ship to the S.W.
5	3					
6	3					
7	3					
8	4					
9	4		S.W.b.W.	W.S.W.		Middle part Squally weather and a heavy sea
10	4					
11	4					
12	4					At midnight Tacked to the N.W.
1	3		N.W.b.W.			At 3 AM. furled the Jib Sail and Main Sail & Flying jib
2	3					
3	3					
4	3					At 8 AM. reefed the Main Sail
5	4					Latter part ends with strong breeze and a rainy
6	4					
7	4					
8	4					Pumps Attended to regularly
9	4		N.W.			
10	4					
11	3					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				58 37	58 46			13 12	

Journal from Sunderland towards Baltimore

Sunday 3 day of September 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		N.W.b.N.	S.W.b.S.		
2	3					This day comes in with strong breezy and a rainy
3	3					
4	3					
5	3					
6	3					
7	3					
8	3					
9	4					
10	4					Middle part fine weather with a strong breez
11	3					
12	3		N.N.W.			
1	3					
2	3					
3	3					
4	3					Latter part ends with fine weather and a strong breez
5	4					
6	4					
7	4					
8	4		N.W.			
9	2					Pumps Attended to regularly
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				58 40	58.51			15-80	

Monday 4 day of September 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	2		N.W.b.N.	W.S.W.		
2	2					This day comes in with fine weather and a light breez with a heavy sea
3	2					
4	2					
5	2					
6	2					
7	2					
8	2					Middle part light airs and heavy sea
9	1					
10	1					
11	1					
12	1					
1	1		S.S.W.	West		At 7.30 A.M. Tacked ship to the S.W.
2	1					
3	1					
4	1					Latter part ends with fine weather and a moderate breez
5	1					
6	1					
7	1					Pumps attended to regularly
8	1					
9	2		S.W.b.W.	W.b.W.		
10	2					
11	2					
12	2					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				59 54	59.55			16 21	

Journal from Sunderland towards Baltimore

Tuesday 5th day of September 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	3		S.W.b.W.½W.	W.b.N.		
2	3					This day comes in with fine weather and a moderate breeze
3	3					
4	3					
5	3		W.b.S.	West		At 8 P.M. Tacked Ship to the N.W.
6	3					
7	3					At 9 P.M. Squally furled all the sails
8	3					At 11 P.M. furled the Topgallant Sails
9	3		W.N.W.	W.b.S.		Middle part strong breeze and heavy sea
10	3					
11	4		West.			
12	2					
1	1				2 points	At 2 A.M. furled the Mains Sail and upper Topsails Jib & Spanker
2	1					
3	1					
4	1					
5	1					At 6 A.M. More Moderate
6	1					at 8 A.M. set the upper Topsails & Mainsail
7	1					
8	1					
9	8	½	N.W.b.W.			Seattle part ends with squally and a head sea
10	9	½				
11	9	½				Pumps Attended to regularly
12	9	½				

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				55.27				17.42	

Wensday 6 day of September 1871

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1	1	½	N.W.b.W.	W.S.W.	8 points	This day comes in with a heavy gale & heavy sea at 1 P.M. furled the upper Topsails Main & Fore Sails
2	1	½				
3	1	½				
4	1	½				
5	1	½				
6	1	½				At 6 P.M. Wore ship to the Southward
7	1	½	S.S.E.		8 points	vessel rowling and labouring heavy
8	1	½				and shipping large quantities of water
9	1	½				At 7 P.M. furled the Lower fore Topsails
10	1	½				& fore Topmast stay sail
11	1	½				
12	1	½				Middle part heavy gale and heavy sea
1	1	½				At 2 A.M. shipped a heavy sea on board
2	1	½				carry the Starboard side lamp
3	1	½	S.S.W.	W.b.S.		
4	1	½				
5	1	½				
6	1	½				Seattle part ends with a strong gale
7	1	½	S.W.			and heavy sea vessel rowling & laboring
8	1	½				heavy
9	1	½				
10	1	½	S.S.E.			
11	1	½				
12	1	½				Pumps Attended to regularly

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				58.57				12.00	

Journal from Sunderland towards Baltimore

Thursday 7 day of September 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	1	½	S.S.W.	S.W.b.S.	8 points	This day comes in with a heavy gale and heavy sea vessell rowling and labor ing heavy
2	1	½				
3	1	½				
4	1	½				
5	1	½				At 4 P.M. Wore Ship to the S.W.
6	1		N.W.b.N.	W.b.S.		At 6 more moderate set the reefed Fore &
7	1					Main sails and lower fore Topsail
8	1					
9	1		N.N.W.b.W.	W.b.W.	8 points	At 8 P.M. Set the upper Topsails &
10	1					jib & Spanker
11	1		W.b.N.			
12	1					Middle part rainey weather & a heavy
1	8		W.b.S.	S.S.W.		sea
2	8					
3	8					At 6.30. Strong gale furled the upper
4	8					Topsails fore & Mainsail
5	8					vessell rowling and labouring heavy
6	8					At 6 Am Wore Ship to the S.W.
7	1		S.W.b.W.	S.W.	6 points	
8	1					
9	1					Seattle part ends with moderate
10	1					weather with a heavy sea
11	1					
12	1					Pumps Attended to regularly

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
				59.22				17.30	

Friday 8 day of September 1871

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
1	11		W.S.W.	S.W.		This day comes in with moderate
2	1					weather and a heavy sea from the West
3	1					
4	1					At 4 P.M. set the Topgallant sails
5	2					
6	2		W.S.	N.W.b.W.		
7	2					
8	3					
9	3		W.b.N.	W.b.W.		Middle part squally weather
10	3					At 2 A.M. furled the Topgallant
11	3					sails
12	3					
1	3					
2	3					
3	3					
4	3					Seattle part ends with fine
5	3		W.b.S.			weather with a strong breze
6	3					
7	3					
8	3					Pumps Attended to regularly
9	3					
10	3					
11	3					
12	3					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				38.27	5829			19.41	

Journal from Sunderland towards Baltimore

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. Saturday 9 day of September 187
1	7	1½	West	N.E.		
2	7	1½				This day comes in with fine weather and a fine breze
3	7	1½				
4	7	1½				
5	7	1½				This day comes in with
6	7	1½				
7	7	1½				
8	7	1½				
9	6		W.N.W.			Middle part fine weather
10	6					
11	8					
12	9					
1	1			East		
2	1					Latter part sends with fine weather and a strong breze
3	1					
4	1					
5	1			S.E.		
6	4					
7	6			S.S.W.		Pumps Attended to regularly
8	6					
9	8					
10	8					W. Hearder
11	8					Board
12	8					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.
				57.29	57.27			23 09	

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS. Sunday 10 day of September 187
1	8		West N.W.	S.S.W.		
2	8					This day comes in with rainy unsettled and a strong breze
3	6		N.W. by W.			
4	5					
5	4					At 8 P.M. Packed ship to the S.W.
6	3					
7	3		W.N.W.	S.W. by W.		
8	3		S.W. by W.	W.N.W.		Middle part moderate weather with a heavy sea from the Westward
9	2					
10	2					
11	2					
12	2		W. by S.	W.N.W.		
1	3					
2	3					
3	4					Latter part ends with a strong and squally weather
4	5					
5	7					
6	5		W.S.W.			Pumps Attended to
7	5					
8	5					
9	5					
10	5					
11	5					
12	5					

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob
					55 28			23-52	

Journal from towards

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1	1869		Provisions opened on board Bark G. Pennell			
2						
3	Oct	28th	1 Bbl of Pork.	Jan.	18th	1 Bbl of Pork.
4	"	30th	1 " " Beef.	"	21st	1 " " Beef.
5	Nov	13th	1 " " Flour.			1 Bag of Bread.
6	"	20th	1 " " Beef.	Feb	7th	1 Bbl of Beef.
7	"	30th	1 Bag of Flour.	"	10th	1 Bag of Flour
8	Dec	6th	1 Bbl of Pork.	"	23rd	1 Bbl of Beef.
9	"	10th	1 Bag of Flour.	March	10th	1 " "
10	"	11th	1 " " Bread	April	28th	1 Bbl of Beef.
11	"	"	1 Bbl of Beef.			
12	"	18th	1 Bag of Flour.			
1	"	28th	1 " "			
2	"	29th	1 Can of Kerosene			
3	"	"	½ Bbl of Peas			
4	"	"	150 lbs. of Sugar.			
5	1870.					
6	Jan	2nd	1 Box of Coffee			
7	"	8th	1 Bbl of Beef			
8	"	5th	1 Bag of Bread			
9	"	"	1 " " Flour.			
10	"	6th	½ Bbl of Beef Tongues			
11	"	"	1 Keg of Pickles			
12	"	14th	1 Bag of Flour			

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS. day of 18
1	1870		Provisions opened on board Bk G. Pennell.			
2						
3	July	1st	1 Bbl of Beef			
4	"	2	1 " " Pork			
5	"	22	1 " " Flour			
6	Aug	17th	1 " " Beef.			
7	Sept	12th	1 " " Flour			
8	"	18th	1 " " Beef.			
9	"	26th	1 " " Pork.			
10	Oct.	4th	1 " " Beef.			
11	Nov	8th	1 " " Beef.			
12	"	29th	1 " " Beef			
1	"	"	" " " Pork			
2	Dec	1st	1 " " Flour			
3	"	12th	1 " " Beef.			
4	"	22nd	1 " " Flour.			
5	"	26th	1 " " Beef.			
6	"	"	1 " " Pork.			
7	"	18				
8	Jan	9th	1 Bbl of Beef			
9	"	23	1 " " Pork.			
10	"	24th	1 " " Beef			
11						
12						

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

Journal from Squards D. Pennell

Provisions used on bord of Barque

day of 18

H	K	F	COURSES.	WINDS.	LEEWAY.	REMARKS.
March 1	11		1 bbl of	Beef		
" 2	6	"	" " "	Pork		
3						
" 4	10	"	" " "	Flour		
" 5	17	"	" " "	Beef		
April 6	16	"	" " "	Beef		
" 7		"	" " "	Pork		
" 8	17	"	" " "	Flour		
May 9	8	"	" " "	Beef		
" 10	27	"	" " "	Flour		
June 11	1	"	" " "	Beef		
" 12	10	"	" " "	Flour		
1	16	"	" " "	Pork		
July 2	26	"	" " "	Flour		
3						
4	9	"	" " "	Flour		
5						
6	5	"	" " "	Pork		
7						
8				28 – 84.2		
9				12		
10						
11						
12						

W. Hazeldine
Boatswain

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob.

H	K	F	COURSES	WINDS	LEEWAY.	REMARKS.
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

day of 18

Course.	Distance.	Diff. of Lat.	Departure.	Lat. by D. R.	Lat. by Ob.	Variation.	Diff. of Lon.	Lon. in.	Lon. by Ob

Mrs W Castle

Dandenong

Mrs W Castle

W Castle

W Castle

